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ABSTRACT

City College of San Francisco's Nursing Department has had an oversubscription of applications and an under-representation of minority students for a number of years. Although the department can only accommodate 96 students per year, over 600 subscribed in 1977. The purposes of this inquiry were to compare associate degree nursing program admissions criteria in California community colleges; determine relationships between these criteria and oversubscription of applicants and the under-representation of minorities; and to identify possible solutions to the problem. Questionnaire responses from 59 program chairpersons and the current nursing student body (196) from the college provided the data. The main conclusions were that oversubscription was a national phenomenon; diversified methods were employed in both testing and utilizing the results for acceptance; the majority of programs used objective admissions criteria; no one method avoided pressure from internal or external forces to the program; the majority of programs were aware of the problem; and ethnic minority students were consistently under-represented. Recommendations include: hire a full-time nursing counselor to advise and recruit minorities; require at least a 2.5 pre-nursing grade point average; eliminate interviews but require a pre-nursing course; and have students demonstrate bilingual proficiency. A literature review, bibliography, and the survey instruments are included. (Author/MB)

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Improving the Applicant Selection Process of the Nursing Program at City College of San Francisco

Fannie E. Brown

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A MAJOR APPLIED RESEARCH PROJECT
PRESENTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF DOCTOR OF EDUCTAION

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Abstract of a Major Applied Research Project Presented to Nova University in Partial Fulfillment for the Requirements for the Degree of Doctor of Education

IMPROVING THE APPLICANT SELECTION PROCESS OF THE NURSING PROGRAM AT CITY COLLEGE OF SAN FRANCISCO

by

Fannie E. Brown

May, 1978

City College of San Francisco's Nursing Department has had an oversubscription of applications and an under-representation of minority students for a number of years. The number of oversubscriptions continued to increase each semester with a total of 600 received last year. The department could only accommodate 96 students per year. The college serves a large multi-ethnic community, but only a small number of minorities had been enrolled and graduated from the program.

The purposes for this inquiry were to compare associate degree nursing program admissions criteria in California community colleges; determine relationships, if any, between these criteria statements and oversubscription of applicants and the under-representation of minorities in these community colleges; and to identify possible solutions or approaches to solutions of the above-stated oversubscription and under-representation.

The primary expectation of this study was to improve the applicant selection process for the nursing program and develop a set of recommendations that would be applicable to other associate degree programs.

The instruments used in the investigation were designed by the writer. Questionnaires from 59 chairpersons of associate degree nursing programs in California, and the current nursing student body (196) from City College of San Francisco provided the data. Ninety-six variables in the chairpersons' questionnaires and 16 in the students' questionnaire related to admissions standards. A computer processed the statistical data. Responses to each of the questionnaires were summarized in frequency counts and percentages. The hypotheses were tested by a t-test analysis with $P < .05$ as the acceptable probability level.

The research hypotheses of the study were expressed in relation to oversubscription of applicants to nursing programs in urban and non-urban areas; the proportion of oversubscription in nursing programs with an open-door policy versus those with a selective policy; and the proportion of ethnic minorities admitted to programs with selective admissions criteria and programs with non-selective criteria as well as programs located in urban and non-urban areas.

The result of the study indicated that there was

an overall mean proportion of 3.55 oversubscriptions in the total number of programs investigated. The mean difference between minority admission to the nursing programs in urban areas from those in non-urban areas was insignificant. Even though there was a difference of .39 between the proportion of oversubscribed applicants to urban versus non-urban associate degree programs, it was small enough to be considered insignificant. The small difference of .04 between the proportion of minorities admitted to nursing programs with selective policies from programs with non-selective programs was insignificant. Therefore all of the hypotheses were accepted.

The main conclusions drawn from the study were that oversubscription of applicants to nursing programs was a national phenomenon; there were diversified methods employed in both testing and utilizing the results for acceptance into the nursing curriculum; the majority of programs utilized objective criteria for admission; no one method of admission avoided pressure from internal or external forces to the nursing department; the majority of programs appeared to be aware of the complexity of the problem; ethnic minority students were consistently and vastly under-represented in all of the programs.

The recommendations offered were to hire a full-time nursing counselor to counsel, advise and guide pre-

nursing students, as well as actively recruit for qualified ethnic minority applicants; to facilitate screening, require completion of all pre-nursing and general education courses with a G.P.A. of at least 2.5; employ a point system—qualified students who were not accepted first time would reapply up to two years and be accepted automatically on a first come, first served basis according to date on application; eliminate interviews, instead offer a required pre-nursing course or seminars for pre-nursing students for general information about the program ending with a proficiency test; follow college catalog procedures for validation of residency and for proof of socio-economic disadvantaged status; include two students and two community representatives on the admissions committee; have students demonstrate proficiency of bilingualism by oral and written tests prepared and administered by language department; educate the public by way of press and news media regarding the complexity of the problem and the unrealistic goal for accepting <u>all</u> students; require applicants with health-related work experience to complete <u>all</u> courses with a G.P.A. of 2.5 just as other applicants; and develop an intensive and extensive recruitment program to prepare, admit and assist ethnic minorities and/or socio-economically disadvantaged students with potential abilities.

It was recommended that the nursing faculty, president of the college, and the Board of Governors utilize the work of this study and react to the recommendations made.

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Chapter I

INTRODUCTION

A defensible educational program must be adjusted to a particular time and place, and the degree and nature of the imposition must vary with the social situation.[1]

The above quotation relates to modern technology and the social needs of the population that are occurring in many community colleges today.

This inquiry focuses on the admissions criteria of an associate degree program in community colleges in California. The two specific problems of the nursing program at City College of San Francisco were: 1) an oversubscription of qualified applicants, and 2) an underrepresentation of minority students in the program. The college serves a large multi-ethnic community with many diverse cultures; yet there has been only a small number of minorities admitted to the program. The fact that several hundred applications are received annually and the department can accept only 96 applicants, due to limited clinical facilities, further compounds the

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[1]George Counts, Dare the School Build a New Social Order? (New York: John Day Co., 1932), p. 18.

problem. The attrition rate in the nursing program is very low, approximately one percent.

Purposes

The purposes of this study were:

1. To compare associate degree nursing program admissions criteria in California community colleges.

2. To determine relationships, if any, between these criteria statements and oversubscription of applicants and the under-representation of minorities in these community college nursing programs.

3. To identify possible solutions or approaches to solutions of the above-stated oversubscription and under-representation problems.

Background and Significance

The incentive for this study was the result of the writer's having worked on the nursing faculty admissions committee for nine months of the 1976-77 academic year to revise the program's admissions criteria. Despite the revision, there were 300 qualified applicants for 96 spaces, and there remained an under-representation of minority students admitted.

The community colleges, with their open-door admissions policy, have seen a massive overall increase in enrollments in the last two decades. The enrollment in the nursing programs within these colleges is no exception. During these years there has been a marked increase in the

number of community colleges conducting nursing programs. Prior to May, 1958 there were less than 40 associate degree nursing programs in the country. This reached to about 100 in 1963 and has grown by about 50 programs each subsequent year, with the 1970 figure over 325 programs.[2] For example, as of 1976, the California community colleges have increased to 103, and 60 of these have associate degree nursing programs.[3]

The increase in admissions to nursing programs has been consistent with the growth of the programs themselves and shows a continuous trend toward collegiate education for technical nurses. Factual evidence (1967) supports the statement that "the most dramatic increases in admissions to nursing programs have been the two year community college programs which increased by anywhere from 20% to 39%."[4] Between the 1964-65 school year and the 1965-66 school year, for example, admissions to two-year college nursing programs increased by 40 percent.[5]

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[2]Figures received from the National League for Nursing Council of Associate Degree Programs, 1971.

[3]The Department of Consumer Affairs, 1976 Accredited Associate Degree Programs of Professional Nursing, p. 2.

[4]American Nurses' Association, Facts About Nursing (New York: American Nurses' Association, 1967), p. 90.

[5]American Nurses' Association, Facts About Nursing (New York: American Nurses' Association, 1966), p. 79.

By 1973 there had been a tremendous increase nationally of graduates from associate degree nursing programs from 3.7 percent (over 30,000) in 1962-72 to 37 percent (over 50,000) in 1973.[6]

That a controversy exists is well-documented in the literature not only by the large number of references concerning the general topic of who shall be admitted to a college program of any kind, but also the number of hours devoted to prediction studies and other methods of determining criteria for admission to colleges.[7] Apparently the major difference of opinion is clearly just who should go to college, with the major controversy being the question of just who will or may profit from the experience of higher education.

Numerous studies have been done in nursing education throughout the years in an effort to find a predictor which could, with reasonable validity, forecast a person's success in nursing. These efforts have been directed primarily toward the prediction of academic success. Taylor, et al. completed a study of the selection practices in 698 schools of nursing and observed that selection practices

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[6]American Nurses' Association, Facts About Nursing (New York: American Nurses' Association, 1973).

[7]Calvin Taylor, et al., Status of Prediction Studies in Utah (Salt Lake City: University of Utah Press, 1962), Part III, pp. 1-7.

primarily revolved around the traditional and intelligence type of predictions and that practically none of the tests included tests of creative abilities, planning abilities, and divergent and convergent thinking abilities. One reason cited for this attention to academic success might be due to the unavailability of a widely recognized evaluation instrument to test the above non-academic and personal abilities generally lacking in admission criteria.[8]

Although several reports have been published which include statements of admission practices in associate degree nursing programs, e.g., Anderson,[9] the University of New York,[10] the National League for Nursing,[11] and Montag,[12] these studies do not include any statistical studies of the possible relationship between admission practices and performance on state board examinations or any other variables such as attrition rates or academic

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[8] Ibid.

[9] Bernice Anderson, Nursing Education in the Community College (New York: J. B. Lippincott Co., 1966).

[10] The University of the State of New York, The New York Associate Degree Nursing Project (Albany: The University, 1964).

[11] National League for Nursing, Report on Associate Degree Programs in Nursing (New York: The League, 1961).

[12] Mildred L. Montag, Community College Education for Nursing (New York: McGraw-Hill Book Co., 1959).

achievement in college.

Most of the reported studies have utilized either high school grades or a pre-college entrance test to measure past academic success or to predict future success, and many have utilized measurable criteria (usually the State Board Test Pool Examinations) in an effort to establish some relationship between admission standards and success in nursing.[13] Taylor, et al. described the situation this way: "Almost totally missing in nursing research are cross validation studies which attempt to develop criterion measures which would be valid in more than one locality."[14]

Writing in the College Board Review, Richard Hagemeyer commented on the changing admission scene at community colleges from another point of view. Historically, the community colleges have been determined to meet the needs of the community which they serve and to make higher education available to all who can profit from it. However, the pressure of increased numbers of applicants and high attrition rates have begun to play a part in changing this picture.[15]

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[13]Doris Franklin, Selective and Nonselective Admissions Criteria in Junior College Nursing Programs (New York: National League of Nursing, 1975), p. 3.

[14]Taylor, op. cit., p. 107.

[15]Richard Hagemeyer, "Community-based Instruction," The College Board Review, No. 99 (Spring, 1976), p. 10.

This same trend of thought was expressed by San Francisco Community College's new chancellor, Herbert M. Sussman, August 29, 1977, during his installation address to the faculty and community, in this manner:

> The unprecedented growth in the community college system has reached a plateau. Educators who had become experts at growing are novices at leveling off and even reducing.
> The challenge of the late seventies and eighties may well be to improve quality with a reduced quantity. The years of feast seem to be at an end.[16]

Extensive expansion of the comprehensive community colleges has contributed to many changes in educational opportunity. The practices of the past for colleges to pick and choose students from among public schools in a community no longer are defensible. Instead, local public colleges must articulate with their public high schools and the community. Today, hosts of new students with varying backgrounds, talents, and creativity are entering colleges.[17, 18]

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[16] San Francisco Community College District, Intercom (October 7, 1977), pp. 1-2.

[17] Clyde Croman, "Problems and Issues Confronting the Admissions Community," College Admissions Policies for the 1970's; papers delivered at the Colloquium on College Admissions Policies, Michigan, June 18-23, 1967. New York: College Entrance Examination Board, 1968, p. 15.

[18] Leland L. Medsker and James W. Trent, The Influence of Different Types of Public Higher Institutions on College Attendance from Varying Socioeconomic and Ability Levels (Berkeley: Center for the Studying of Higher Education, University of California, 1965), p. 90.

The notion is fading that unidimensional qualities of students define the quality of higher education. Gradually, quality is becoming measured by the degree to which the advantages of higher education are extended and expanded to students representing the many differing talents and backgrounds.

The above changes have had an influence from nursing practice on nursing education. As a nation rich in knowledge and technology, more and better health care practices become an expectation of the people and are increasingly viewed as a human right.[19]

The nursing literature of the past,[20] as well as that of more contemporary times,[21, 22] demonstrates the need for organized nursing to be responsive to societal needs for health care services and to develop appropriate practice roles and functions.

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[19]"National Health Insurance: Health Care as a Basic Right, ANA President Testifies," The American Nurse, 6:1, March, 1974.

[20]Esther Lucile Brown, Nursing for the Future (New York: Russel Sage Foundation, 1948), pp. 42, 57-58, 73-78.

[21]Esther Lucile Brown, Nursing Reconsidered: A Study of Change, Part 1, The Professional Role in Institutional Nursing (Philadelphia: J. B. Lippincott Co., 1970), pp. 1-3, 12-13, 15-16, 33, 42, 64, 69.

[22]Secretary's Committee to Study Extended Roles for Nursing, "Extending the Scope of Nursing Practice," as quoted in Nursing Outlook (January, 1972), 20:46-52.

As a response to major changes in the society and in the health care delivery system, nursing has developed a range of levels of education and specializations for its practitioners. One of the problems associated with some types and levels of specialization has been the fragmentation of nursing care and a resultant decline in the quantity and quality of care available to various segments of the population.

The present emphasis on nursing's responsibility for providing primary care and continuity of care for patients and families is one attempt to meet demands of society for quality health services. The changes proposed for nursing practice require not greater numbers of the least well-prepared but more effective use of all levels of nursing personnel.[23]

Meeting the present and future demands for nursing care means, then, increasing not only the numbers of nursing personnel but also the quality of the educational preparation and the quality of practice.[24]

The status of nursing education prior to 1950 was dominated by two types of programs: for registered nurses

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[23]National Commission for the Study of Nursing and Nursing Education, An Abstract for Action (New York: McGraw-Hill Book Co., 1970), pp. 40-41, 54-55, 61, 69-73, 76.

[24]Secretary's Committee to Study Extended Roles for Nurses, op. cit., pp. 15-27.

and for practical nurses. The program representing the greatest proportion was for preparation of registered nurses, which at that time was considered the only available form for preparing the "professional" nurse.

The above program generally recruited high school graduates. Almost all the education was conducted and controlled by hospitals. Very few registered nursing candidates were prepared in programs granting degrees or controlled by colleges or universities.

The curricula of the program had what was called a pre-clinical period of classroom or theoretical instruction followed by a clinical period for practicing nursing. The length for most registered nursing programs was thirty-six months.

During World War II, registered nurses increased in number.

The development of technical nursing was conceived by Montag in 1949.[25] Technical nursing education did not evolve from the programs in existence. This model for education incorporated a means for nursing to prepare for the challenges to expand and to extend nursing's delivery of health care, and for the changing opportunities in education at the postsecondary level.

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[25]Mildred L. Montag, Education of the Nursing Technician (New York: John Wiley and Sons, Inc., 1951.

One of the major expectations was that programs for technical nursing education would attract individuals who otherwise would not enter the preparation for nursing.[26] Nursing programs required the ability to recruit individuals attracted to the mainstream of post-high school education. These programs were deliberately placed in the institution generally matched to the nature of technical education and in those institutions offering educational programs on the post-secondary level.[27, 28] The expectation in 1949 was that community colleges would be expanding throughout the United States and that these colleges would be the most likely institutions for this type of program. Following the pattern of technical education in general, the curriculum included a balance of technical education courses and general education courses relevant to the specialized nursing content.

Medsker and Tillery summarized one problem in the development of community college education as follows:

> Community college leaders have worked diligently to define a level of occupational education which would differentiate each preparation for employment from secondary occupational programs and from those of special post-secondary schools. In spite of warnings

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[26] Ibid., pp. 77, 108, 109.

[27] Ibid., pp. 79-86.

[28] Mildred L. Montag, "Technical Education in Nursing," American Journal of Nursing, 63:100-103 (May, 1963).

> (Harris, 1964; Vern, 1964), some colleges may have set too high standards for some of their occupational curricula. The carefully developed technical and semiprofessional programs of the community colleges frequently have such high standards that they must compete for students who aspire to transfer to senior colleges. Neglect of appropriate employment preparation for many students of modest ability and achievement seriously limits the comprehensiveness of the community college program.[29]

Prior to technical nursing education, registered nursing candidates tended to be single females below age 19. Most students were from lower middle and middle class homes. Rarely did men and black or other minority students enter nursing.

As two-year colleges became locally convenient to students, some of the barriers to post-secondary education were expected to be reduced and educational opportunity made more accessible.

Community college education for nursing succeeded in what it set out to do. Not only did these programs prepare a registered nursing practitioner for technical competency in a shorter period of time, but they also met many needs of the students.[30]

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[29]Leland L. Medsker and Dale Tillery. Breaking the Access Barriers: A Profile of Two-Year Colleges, prepared for the Carnegie Commission on Higher Education (New York: McGraw-Hill Book Co.), p. 60.

[30]Carrie Lenburg, "Educational Preparation for Nursing—1973), 21:588-589.

Carnegie pointed out that recruiting and educating more of the disadvantaged could help to increase the number of nurses:

> Equally important, it would be a way of helping a group of people to fulfill their potential as well. From an economic point of view, the money invested in the education of students from this population would yield returns to individuals and society by helping them to rise above the poverty level and be self-supporting, and would increase the national economic product by giving them spending power and tax status. Incrreasing health manpower should raise the quality of patient care.[31]

The significance of the study was revealed by the large number of applicants applying to City College of San Francisco's nursing program each semester. It also reflects the changing patterns in the lives of the older students.

In comparison to the financial cost in public and private universities and colleges, the associate degree program is the most economical and expedient way to prepare technical or semi-professional nurses.

The existence of the two-year nurses' program makes education a practicable alternative for a short re-entry period into the labor force. Furthermore, Rines implied that "graduates of associate degree nursing programs now constitute a significant proportion of the work force

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[31]Elizabeth M. Carnegie, Disadvantaged Students in R.N. Programs (New York: National League for Nursing, 1972).

in nursing and seem to be having a sizable impact in all types of health care settings."[32]

Some of these mature students are coming to the community colleges to avail themselves of educational opportunities for the first time.

Wagner, Marsha and Haug suggested that for many ethnic minority students, a college education was never a feasible alternative. With the development of adult education and open admission, whole new worlds have opened up at their doorsteps.[33]

The City of San Francisco has different ethnic minority communities adjacent to each other. Orque has aptly expressed the matter this way:

> The increasing mobility of people and the variety of ethnic groups they represent have special meaning to professional nursing. Often nurses must plan and give care to people whose values and concepts concerning health and health care differ from their own. If the care is to be effective and relevant, the nurse must have some knowledge of the patient's culture and belief system and ways she can incorporate nursing care within it.[34]

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[32]Alice K. Rines, "Associate Degree Education: History, Development and Rationale," Nursing Outlook (August, 1977), p. 496.

[33]Wagner, Marsha and Haug, Chicanos: Social and Psychological Perspectives (St. Louis: The C. V. Mosby Co., 1971).

[34]Modesta S. Orque, "Health Care and Minority Clients," Nursing Outlook (May, 1976), pp. 313-316.

Dairty pointed out that because of the past history and present status of poor health care delivery in many ethnic communities, it is imperative to educate registered nurses of similar cultural or sociological backgrounds so that they can function more effectively in their communities.[35]

With knowledge, skills and the ability to assess needs, as well as communicate, ethnic minority nurses can make a difference in the delivery of quality health care. They can be initiators of positive change in their communities.

Ellison emphasized that minority health professionals were vastly underrepresented in the profession. He predicted that they would be invisible in the future if existing admission policies of nursing schools prevailed.[36]

City College of San Francisco is a tax-supported institution. It has social responsibilities and educational goals to fulfill.

The Nursing Department chairperson and the nursing faculty admissions committee also indicated support for this study.

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[35]W. Dairty, "Crucial Health and Social Problems in the Black Community," Journal of Black Health Perspectives, Vol. 1, No. 3 (June-July, 1974), pp. 26-28.

[36]Ralph Ellison, The Invisible Man (San Francisco: Josey-Bass, Inc., 1952), pp. 33-35.

All of the above factors reinforced the need for this study. Improving the applicant selection process for the nursing program and developing a set of recommendations that would be applicable to other associate degree programs with the same problem was the prime anticipated outcome of this effort.

Research Questions

The following questions were formed for this inquiry:

The critical issues appeared to be: Who should be admitted? Are associate degree nursing programs supplying sufficient graduates for the profession? Are associate degree nursing programs producing a surplus of graduates for the profession? How can the applicant selection process at City College of San Francisco's Nursing Department be improved? Is the oversubscription of applicants of nursing programs a national, regional, or urban problem? What is the responsibility of the community college as a tax-supported institution to all the citizens of the community? To what extent will the college fulfill its educational goals for minorities?

What is the relationship between the lack of adequate representation of qualified minority admissions to nursing programs in urban areas versus non-urban areas? What is the relationship of oversubscription of applicants of nursing programs with an open-door admission

policy versus a selective admission policy? How can the problem of oversubscription of applicants be resolved or modified as effectively as possible?

Purposes

The purposes for undertaking this study were:

1. To compare associate degree nursing program admission criteria in California community colleges.

2. To determine relationships, if any, between these criteria statements and oversubscription of applicants and the under-representation of minorities in these community college nursing programs.

3. To identify possible solutions or approaches to solutions of the above-stated oversubscription and under-representation problems.

Assumptions

In the interest of treating one's colleagues ethically, it was assumed that the admission practices as described by respondents to the Phase I questionnaire were, in fact, executed as described by them in the questionnaire.

It seemed reasonable to assume, in light of national statistics, that faculties in the sample colleges had comparable educational backgrounds and, therefore, comparable competencies with which to evaluate students for admission.

The final assumption, based on the writer's personal

knowledge of basic requirements for nursing, was that all colleges conducting associate degree nursing programs are, to some extent, selective in that they use some measure of selectivity regarding moral character traits. In addition, all nursing programs consider some physical disabilities, such as blindness, a pronounced language barrier, and overt emotional instability as a deterrent to admission. It also is reasonable to assume that because of the subjective nature of interviews, the interviewer(s) or the person(s) reading references make judgments that might or might not be able to be proven valid.

It is a fact that all schools conducting nursing programs to prepare for licensing as a professional nurse in the State of California require either a high school diploma or a high school equivalency diploma as part of their admission procedures.[37]

Limitations

The study was limited to the 59 chairpersons of associate degree nursing programs in California, and to the current student body (196 students) of the nursing program at City College of San Francisco.

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[37]The Department of Consumer Affairs, 1976 Accredited Associate Degree Programs of Professional Nursing (Sacramento, Ca.: Board of Nursing Examiners), p. 2.

Hypotheses

Based on the review of the literature, which revealed no objective evidence to support contrary hypotheses, and as a result of the writer's direct experience in associate degree nursing programs, the following research hypotheses were formulated so that they could be accepted or refuted statistically.

Hypothesis 1:

There will be no significant difference in the mean proportion ($p. < .05$) in the oversubscriptions in schools with an open-door policy from the proportion of schools with selective admission criteria.

Hypothesis 2:

There will be no significant difference in the mean proportion ($p. < .05$) between minority admissions to nursing programs in urban areas from those in non-urban areas.

Hypothesis 3:

There will be no significant difference in the mean proportion ($p. < .05$) of oversubscribed applicants to associate degree nursing programs in urban areas from those in non-urban associate degree nursing programs.

Hypothesis 4:

A comparison of selective versus non-selective admissions criteria in associate degree nursing programs

will demonstrate that there will be no significant difference in the mean proportions of minorities admitted to the program with selective versus non-selective admissions criteria when tested at ($p < .05$).

Definition of Terms

The terms used in this study were defined as follows:

Associate degree nursing program. This form of higher education for nursing is administered by institutions of higher education (community colleges, senior colleges, and universities); it qualifies the graduate for an associate degree and also to take the state licensing examination for registered nursing practice. Its length generally is 18 months.[38]

Selection process. A method that is used to choose applicants for admission to nursing programs.

Open door policy. The unique adaptation by some community colleges to allow for the realization of full human potential for anyone who may seek admission.[39]

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[38]Joan E. Kaiser, A Comparison of Students in Practical Nursing Programs and in Associate Degree Nursing Programs (New York: National League for Nursing, 1975), p. 13.

[39]Sister Joseph De Leo Frank, "A Survey and Assessment of Admission Policies to Resolve the Problem of Oversubscription of Applications," A Practicum Presented to Nova University in Partial Fulfillment of the Requirements for the Doctor of Education Degree (March, 1975).

Selective admission policies. Those found in college programs which have a definitive cutoff point on measures of academic ability or potential such as a standard admission test.[40]

Socially disadvantaged. Refers to people who differ from each other in a number of ways but have in common such cahracteristics as low economic and social status, low educational achievement, tenuous or no employment, limited participation in community organizations, and limited ready potential for upward mobility. These include members of minority groups in the United States, e.g. Blacks, Mexican-Americans, American Indians, Oriental, and White.[41]

Non-selective admission policies. Those found in colleges or programs which have flexible and minimal admission requirements and admit any student having a high school diploma or a high school equivalency certificate.[42]

Urban area. An inner city with a population of approximately 800,000 people or more.

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[40]Doris R. Franklin, Selective and Nonselective Admissions Criteria in Junior College Nursing Programs (New York: National League for Nursing, 1975), p. 4.

[41]Carnegie, op. cit., p. 11.

[42]Sister De Frank, op. cit., p. 12.

Non-urban area. Small towns or suburbs with a population range of several thousand to fifty thousand people.

Oversubscription of applicants. Applications are received from more potential students than the nursing department can accommodate.[43]

State Board Test Pool Examination scores. Those standardized scores obtained on the National League for Nursing State Board Test Pool Examination which are utilized by the California Board of Nurse Examiners as a basis for determining eligibility for "safe practice" as a registered professional nurse.[44]

NLN Tests. National League for Nursing tests that are developed to test a wider gamut of abilities in a particular area. The results may be used as predictors of State Board Examination results.[45]

A review of the literature indicated many studies related to nursing that pertain to selection and recruitment of students' motivation, students' images of nursing,

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[43] Ibid., p. 1.

[44] Franklin, loc. cit.

[45] Harriet Schneider, "Standardized Tests in Nursing," National League for Nursing, New York; presented at the Open Curriculum Conference III, November 7-8, 1974, p. 87.

aptitudes, values and dropouts.

The following chapter includes synopses of some prior studies that were selected because the topics have relevance for this study.

Chapter II

REVIEW OF RELATED LITERATURE

The studies below pertain to selection and recruitment of students for schools of nursing, with prediction of success; characteristics and career expectations of enrolled students; students' perception of nursing; and problems in retraining the disadvantaged. The studies are referred to by the names of the investigators.

Taylor and Others[46]

Probably the most substantive research of career patterns in nursing was conducted in 1963 by Taylor and others on selection and recruitment. The purpose of the study was to determine what research had been done in the area of selection in schools of nursing and related fields. It was hoped that the data, gathered from responses by 698 schools of nursing to questionnaires, would encourage schools of nursing to improve their selection programs, indicate areas of needed research, and lead to an increase

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[46]Calvin W. Taylor, et al. Selection and Recruitment of Nurses and Nursing Students (Salt Lake City: University of Utah Press, 1963).

in creative studies that would aim at unresolved areas in the prediction of nursing performance, not only in schools but also on the job.

The investigators strongly recommended that further research efforts be more diversified, with higher priority given to determining how well grades and other performance indicators in school and how well other tests and personal devices predict success on the job in nursing. It is clear that related manpower problems of potentially great consequence in nursing are the recruitment of applicants for nursing schools, the dropout problems in schools, and turnover problems in nursing practice. If more applicants can be recruited for nursing schools and especially if differential recruiting can also occur, then the entire selection problem will be facilitated. Taylor's definition of differential recruiting is that the kinds of persons being recruited generally possess, to a higher degree than the population at large possesses, the kinds of characteristics needed to perform successfully in nursing.

Davis and Olesen[47]

Improvement in recruiting plus improvement in selection programs can form a powerful combination in

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[47]Fred Davis and Virginia Olesen, "Baccalaureate Students' Images of Nursing: A Study of Change, Consensus and Consonance in the First Year," Nursing Research, XIII (Winter, 1964), pp. 8-15.

assisting students to choose the programs that will enable them eventually to make their greatest contributions. Programs that bring about reductions in the number of drop-outs and turnover of persons with good potential for nursing are also directly helpful. Davis and Olesen reported on changes in the images of nursing among first-year baccalaureate students at the University of California School of Nursing at San Francisco. A questionnaire was administered to 75 students on admission and again at the end of the first year.

A comparison of the responses was made, and some of the findings were: a pronounced trend toward individualistic and innovative images and away from bureaucratic images; also, a minor and inconsistent trend away from lay images of nursing; an increase in the personal importance students attach to individualistic innovative images but no appreciable change in the importance they attach to lay images. From time of entry to completion of the first year, these students showed no significant increase in consensus among themselves, either with respect to their characterizations or the personal importance they attach to such characterizations, and there was no evidence that students grow less "dissonant" in terms of reconciling their images of nursing with personal value.

Dustan[48]

Dustan studied the characteristics of students in three types of nursing programs to determine the congruence between the requirements and objectives of each of the three types of programs and the characteristics and career expectations of students enrolled in four schools of nursing in one community—a baccalaureate degree program, an associate degree program, and two diploma programs. The student characteristics studied were: scholastic aptitude; interests and values; social, economic, and educational backgrounds; reasons for selecting nursing and the types of positions they would seek after graduation; and interest in continuing their education.

Dustan noted that the students in all three types of programs shared, as reasons for choosing nursing, "interest in and liking for people," "interest in caring for the sick," and "interest in the medical field." However, baccalaureate degree students chose their programs because of opportunities for professional advancement and personal development; associate degree students for reasons of expediency (e.g., cost, length of program); and diploma students, because it "would provide them with the preparation to do what they wanted to do."

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[48]Laura C. Dustan, "Characteristics of Students in Three Types of Nursing Education Programs," Nursing Research, XII (Spring, 1964), pp. 159-66.

Rutledge and Gass[49]

The study by Rutledge and Gass, based on a program at Shapero School of Nursing of Sinai Hospital in Detroit designed specifically for the disadvantaged, is a basic contribution toward solving the problem of retraining the disadvantaged, and the findings are applicable to the training of the entire disadvantaged group, not only those in practical nursing. The study revealed that much of the retraining problem lies with the personnel responsible for counseling and teaching. It also reflected on the fact that higher education does not eradicate deep-seated, anti-Negro attitudes, nor does it necessarily provide the understanding and compassion needed to break the barriers that exist between the disadvantaged and the middle class.

Entering this experimental program in practical nursing as defeated, uncertain, and unskilled workers, 14 of the 19 in the class graduated and left as sensitive men with a purpose and a contribution to make to the health field.

Langlois and MacMillan[50]

Langlois and MacMillan studied the first group of

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[49]Aaron L. Rutledge and Gertrude Zemon Gass. Nineteen Negro Men: Personality and Manpower Retraining (San Francisco: Jossey-Bass, 1967).

[50]Harold V. Langlois and Robert MacMillan, Evaluation of Pre-Matriculated Program for Disadvantaged Students at the University of Rhode Island (Kingston, R.I.: University of Rhode Island Press, 1969).

52 high school graduates from disadvantaged backgrounds who participated in an intensive eight-week summer session at the University of Rhode Island in 1968 designed to prepare them for admission to college, including collegiate programs in nursing education. This program, geared to meet the special needs of this disadvantaged group, enabled students to try their skills and abilities at college-level work and to assess their feelings and attitudes in the university environment. Because of its success, the university has continued this special summer program. Although the name of the program has been changed from "Program for Disadvantaged Students" to "Talent Development Program," the criteria for selection still incorporate evidence of the disadvantaged status of the applicant.

Franklin[51]

Franklin's study was a comparison of high school averages and standardized test scores of students between selective and non-selective associate degree nursing programs at the time of their admission to the program in the community colleges in New York State. Only schools that had graduated at least one class from the nursing program by June, 1966, and only the first testings on state board examinations were considered to determine where there was

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[51]Franklin, op. cit.

a difference in attrition, final grade point average and state board examination scores. Data were included from 9 selective and 5 non-selective schools; 762 non-selective and 755 selective students were admitted to the above programs during Fall 1963 and Fall 1964.

The study revealed that there was a significant difference between selective and non-selective community college nursing programs in New York State in overall attrition, attrition due to academic failure and rate of failure on the State Board Examination. The selective programs showed a lower overall rate of attrition, a lower rate of attrition due to academic failure, and a lower rate of failure on State Board Examination. Some of the findings indicated that factors other than admission practices may be operating to cause these differences.

The author recommended additional study in areas of academic attrition and nonacademic attrition in the use of the State Board Examination as the sole determinant of eligibility to practice as a technical nurse, and additional study of admission devices that will measure such things as motivation, creativity and dimensions of success.

Carnegie[52]

Carnegie made a comparison between graduates and withdrawals from schools of nursing in the Seatlantic

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[52]Carnegie, op. cit.

Project for the Disadvantaged who had had pre-nursing and continued assistance with graduates and withdrawals in a similar group, characterized as a career-pattern group, whose members had had no known preparation for admission to a school of nursing nor any special help after admission. The main objective of the study was to determine whether a planned preparatory program for admission to a nursing school had an impact on the students' success; 816 students from ten associate degree nursing schools in New York State participated. In Group I, 143 students represented the urban economically disadvantaged; the rural disadvantaged group was referred to as a career-pattern group, with 673 students.

In the selection of the disadvantaged group, race was not a deciding factor. The population included disadvantaged persons from many ethnic groups—Blacks, Puerto Ricans, Mexican-Americans, American Indians, Orientals, and Whites.

Disadvantaged status was determined by family rank on the poverty index according to information provided by the students at the time of admission, with consideration given to the community in which the student lived, family income (below $2500 a year); the number of persons living in the household who were working and contributing to family income; and the student's disadvantaged status. The findings indicated that given assistance—academic counseling and guidance—fewer students will withdraw than

if this assistance is not given.

On the basis of the findings, she recommended that schools of nursing give priority to the student who may or may not be in the top fourth of her high school graduating class but who has potential and whose parents are not necessarily in the higher social classes, and find ways to give financial and academic assistance if warranted.

Kaiser[53]

The study was based on a comparison of six associate degree nursing programs and 17 practical nursing programs to determine and to provide information on the differences and similarities in selected characteristics of these students. The findings of the study concluded that the students attending these associate degree and practical degree programs were more similar than dissimilar. Students possessing insufficient information about characterization of programs and practices can hardly be recruited into programs that will be to their maximum advantage and later satisfy their career goals.

As contemporary nursing and nursing education are becoming compounded by the rapidly changing society, the remaining vestiges in nursing, and the complexities of articulating a larger society to individuals, the author strongly recommended that organized nursing direct its

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[53]Kaiser, op. cit.

primary emphasis to the refinement and evaluation of the system or systems of nursing education at the pre-service level that bring the levels of education for nursing practice conceived in the early 1950's within the nature of conditions for the 1970's and 1980's.

Nicholson[54]

A study of admission criteria was conducted at Brown University, Providence, Rhode Island. It was found that 75 percent of high risk students from classes 1966 and 1968 and over 80 percent of such risks of the class of 1969 actually graduated. The conclusion was that admissions officers can select risks who will graduate.

Stepsus[55]

This study was designed to provide Widener College (Pennsylvania) with data to develop admission policy for the registered nurse in the baccalaureate program of nursing. The subjects studied were the deans of 14 accredited baccalaureate programs of nursing in the State of Pennsylvania.

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[54]Everard Nicholson, Success and Admission Criteria for Potentially Successful Risks (Providence, R.I.: Brown University, 1970).

[55]Patricia Ann Stepsus, "Development of an Admission Policy for the Registered Nurse in a Baccalaureat Program of Nursing," A Practicum presented to Nova University in partial fulfillment of the requirements for the Doctor of Education degree (December, 1971).

A letter and questionnaire comprised of open-end and closed-end questions concerning admission policies and awarding of credit and advanced standing to the registered nurse were mailed to each school. There was a 71 percent return.

The results of the study showed that 80 percent reserved spaces for registered nurses; 30 percent had different admission policies for the associate degree nurse and the diploma nurse; all institutions accepted handicapped students; 10 percent reserved spaces for registered nurses from minority groups; all indicated that transcripts from high school, nursing programs, and all colleges attended were part of the application; 60 percent designated the College Entrance Examination as required for admission; all institutions awarded credit or advanced standing to the associate degree nurse; and 80 percent used nursing challenge examinations.

Research Medical Center, Kansas City, Missouri School of Nursing[56]

Ways to improve the quality of education offered by the school of nursing and to provide a data base for future studies to determine the reasons for persistence or withdrawals of the Class of 1975 were examined. The

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[56]Research Medical Center, "Persistors and Withdrawals: An Analysis of the Differences" (Kansas City, Missouri School of Nursing, 1975).

variables examined included high school ranks, University of Missouri, Kansas City grade point average, and the academic and non-academic measures on the Psychological Corporation's Entrance Examination for Schools of Nursing. In general, the results tended to support previous studies regarding the use of measures of academic achievement and ability in predicting success or persistence in school, but the results did not support previous findings based on the use of measures of non-academic variables.

Taylor[57]

Taylor's study was based on an analysis of selected multiple characteristics of nursing students with academic performance. A questionnaire was used to obtain information concerning family background, socio-economic background, educational experiences prior to entering and during enrollment at the University of Virginia, use of leisure time, educational interests, nursing interests, opinions toward nursing practice and selected achievement data. A regression approach was used to identify a reliable predictive measure of academic performance by students in the school of nursing at the University of Virginia.

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[57]Alton Taylor, Analysis of Bachelor Degree Recipients in the School of Nursing, University of Virginia, A Second Report (Charlottesville: University of Virginia, Office of Institutional Analysis, 1970).

Lenburg[58]

The book was organized in a series of articles exploring the issues and problems generated by open learning and career mobility approaches in nursing education within the context of higher education. The author focused on a description of representative models of career mobility patterns and approaches, and arranged the presentations in six parts, including essential information about their development, implementation, problems, curriculum design, learning and evaluating methods, resources and specific descriptive data about students.

North Carolina State Board of Education[59]

Advance placement policies identified in this booklet were designed to aid persons who are potentially qualified by prior training or experience for advance placement in programs leading to graduation in nursing or practical nursing. The data were gathered from all 82 programs of nursing approved by the state board for 1975. The trend toward improving educational opportunities for experienced students within a minimum loss of time and effort was found to be gaining momentum. Methods include: credit without

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[58]Carrie B. Lenburg, Open Learning and Career Mobility in Nursing (St. Louis, Mo.: C. V. Mosby Book Co., 1975).

[59]North Carolina State Board of Education, Advance Placement Policies of Nursing Education in North Carolina (Chapel Hill: North Carolina University, 1975).

examination for previous experience in a formal educational program, credit by written examination for theoretical nursing courses, credit by practical examination for clinical courses, credit by transfer, and credit by passing standardized or departmental examinations. Specific data were tabulated for nursing programs leading to certificates, associate degrees, diplomas and baccalaureate degrees with regard to admission policies and credit policies for nursing.

Grippano[60]

This correlational study was conducted to determine the relationship between the American College Test (A.C.T.) composite score and academic success or failure as indicated by the GPA and state board licensing examination score of students and graduates at College of Lake County, Grouplake, Illinois' Licensed Practical Nurse (LPN) program. One hundred thirty-two graduates and 34 currently enrolled students participated, of whom 127 had taken the A.C.T. preadmission test, and 108 had written the state board examination. The first five classes of the program were studied. The findings indicated a correlation of 0.438 between the A.C.T. and GPA and 0.542 between the A.C.T. and state board

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[60]Gloria M. Grippano, "A.C.T.: Its Relationship to Practical Nursing Education," A Practicum presented to Nova University, Fort Lauderdale, Fla. (December, 1973), in partial fulfillment of requirements for the Doctor of Education degree.

examination score. As a result of this study, the screening committee for the practical nursing program will have a more valid determination of minimum cut-off composite score on the A.C.T. pre-admission test in the selection of potentially successful students and graduates. It was recommended that the screening committee evaluate and improve the procedure for selection continuously for successful practical nursing students in future classes.

Cusick and Harckham[61]

The purpose of this study was to determine whether six personality variables, presently used in admissions decisions by a nursing school in Louisiana, were effective predictors of success on the State Board Examination, the nursing examination for licensing. The personality variables were measured by subtests of the Personal Preference Schedule of the Psychological Corporation Examination for Schools of Nursing Achievement, orderliness, persistence, congeniality, altruism and respectfulness. Two classes of nursing students in 1968 and 1969 were studied. The State Board Examination taken after completion of the 24-month program was a composite score of five sub-tests—medical,

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[61]Patricia Cusick and Laura D. Harckham, "The Effectiveness of Six Personality Variables in Predicting Success on the Nursing State Board Examination," a paper presented at the annual meeting of the American Educational Research Association (New Orleans, La., February, 1973).

surgical, obstetrical, pediatric and psychiatric nursing. The result revealed that the scales apparently have little value in predicting success on the State Board Examination, but the small sample size should be considered in interpretation.

The recommendation was to study other personality measures as predictors.

De Frank[62]

This study was designed to examine the random selection process of admission in terms of its adherence to the college's "open door" philosophy, which was utilized at Delaware Technical and Community College's associate degree program of nursing. A questionnaire seeking information about admission policies and public reaction to an oversubscription of qualified applicants was sent to 30 public "open door" colleges offering nursing programs. Twenty-two responded. Summarizing the assessment of policies in other programs, De Frank noted that there is an oversubscription of applicants to nursing programs across the country, and these are not singular to any specific educational approach; there are widely diversified methods in both testing and utilizing results and acceptance into the nursing curriculum; there seem to be many interpretations to the "open door" concept based mainly on interpretation of minimum qualifications for entrance; no one method

[62]De Frank, op. cit.

of admission emerges as a way of avoiding pressures from sources within or external to the college; the majority of colleges are aware of the complexity of the problem that addresses itself to how best to meet the demands of "open door," affirmative action, equal opportunity, etc., while at the same time handling the problem of oversubscription of applications to the programs. The recommendations were to adopt a system of random selection with increased opportunities for reapplications and an automatic acceptance at a specific point; and to begin a dynamic public relations activity to inform the public of the system selected and the rationale upon which it was chosen.

Johnson[63]

This study was the result of the National League for Nursing's annual survey of state approved schools of nursing in the 56 jurisdictions of the United States, based on educational preparation for nursing, 1975. The programs surveyed include those which prepare for beginning practice in nursing (baccalaureate, associate degree, diploma and practical nursing). Every three years a survey is conducted to determine the distribution of men and minority students among all students reported in the annual survey. The information on black students was augmented by data on

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[63]Walter L. Johnson, NLN, "Educational Preparation for Nursing—1975," Nursing Outlook (September, 1976), Vol. 24, No. 9.

students of Hispanic, American Indian and Asiatic backgrounds. The findings were: without exception, larger proportions of R.N. basic programs have reported admitting, enrolling, and graduating men and minority students than have practical nursing schools.

This was not unexpected, for the geographic areas from which the R.N. students are drawn are usually larger and have more diverse populations; usually, though not always, the highest reporting enrollments, admissions, and the graduations of minority students are found among baccalaureate programs with associate degree programs a close second; invariably larger proportions of schools report minority students enrolled than admitted or graduated. For instance, admissions over several years may be mirrored in enrollment counts for a given year; there are a number of influences within the ethnic population that affect the availability of candidates for entry into and continuation in programs of nursing—the size of the population and regional clustering. These groups are pocketed in specific areas of the country, and their distribution affects the possibility of their members' entry into nursing programs. We would call attention especially to the drop in proportions of blacks admitted, enrolled, and graduated in associate degree programs and practical nurse programs. A counter-balancing influence is the gains seen in baccalaureate programs.

The above studies indicated the problems and

approaches that nursing programs and schools have encountered in the past while endeavoring to establish admissions criteria. The research done by De Frank and the National League for Nursing is specifically related to this study. Both of them documented the complexity of the two-fold program experienced at City College of San Francisco.

De Frank especially noted that there were no easy solutions to the problems and/or no unique method or approach to selection criteria that would benefit all associate degree nursing programs. Each program must develop strategies that will benefit and work for their own communities, although portions of it may be applicable to other programs.

The Seatlantic Fund

The Seatlantic Fund was set up in 1935 by the late John D. Rockefeller, Jr. specifically for aid to nursing. It has funded several programs in nursing: the pilot project for the establishment of associate degree programs, the National League for Nursing Career Program to recruit more students, and conferences for faculties of associate degree programs and Seatlantic Project, a nursing education program for the disadvantaged in which ten colleges and universities participated. The common thread of recruitment was academic remediation while in high school and continued academic help after admission to nursing

counseling,cultural enrichment and financial assistance through the latter specific program. Thus, the goal of the Seatlantic Project was not only successful admission of students to a nursing program, but successful graduation.

Carnegie noted the rapidly increasing number of nursing schools and organizations that have sought and received funds from the federal government and private foundations to conduct programs for the disadvantaged similar to Seatlantic's.[98]

Another source of funds mentioned was ODWIN (Opening the Doors Wider in Nursing), now independently incorporated. It was an outgrowth of a project sponsored and conducted by the Alumni Association of Boston University School of Nursing to assist persons from minority and low income groups to enter and complete a program in nursing.

The University of California, Berkeley, currently has a similar funded project called Professional Development Program for general education preparation. Minorities with college potential are recruited from the local high schools in the sophomore year and tested in English comprehension and mathematics. Those who are accepted subsequently begin and continue a summer program during the following two years. After high school graduation and completion of the program, students are automatically

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[98]Carnegie, op. cit., p. 2.

accepted in the university system. Counseling assistance and career guidance continue throughout the program.

The next chapter will include the procedures and methods used in this study.

Chapter III

PROCEDURES AND METHODOLOGY

Population

The population in this study included two groups, each utilized in a separate phase. Phase I involved 59 chairpersons of associate degree nursing programs in California community colleges. Phase II was comprised of the current student body of the nursing program (196 students) at City College of San Francisco.

Collection of the Data

Data for this study were collected by interviews and questionnaires. Prior to the development of the chairpersons' questionnaires, four local chairpersons were contacted by telephone for appointments for personal interviews. (See Appendix D.) The purpose of the interview technique was to get an idea of how the chairpersons to be queried would respond to items being planned for the questionnaire. The list of names and addresses of the associate degree nursing programs was obtained from the chairperson of the Nursing Department of City College of San Francisco.

To test the instrument, a pilot study was made of responses of the above four chairpersons who had been

previously interviewed. Four questionnaires and cover letters were mailed to them; all four were promptly returned by mail. The questionnaires were reviewed by a statistician, five peers from the nursing faculty, including the chairperson, and three other nurse educators from programs leading to registered nursing licensure. They suggested changes in the wording of some of the questions, additions, and, in a few instances, the repositioning of items. The questionnaire was then revised as indicated.

A questionnaire was mailed to each of the 59 chairpersons with a cover letter explaining the rationale for the study, and a self-addressed, stamped envelope for convenience of returning was enclosed.

By the end of three weeks, 44 questionnaires had been completed and returned. A second mailing was made at this time to the remaining 15. Within the next three weeks, 7 more forms were completed and returned. A total of 51, or 86 percent, was studied in phase I.

The questionnaire for phase II was developed and submitted to the entire nursing faculty at City College of San Francisco for commentary on clarity, comprehension and reliability. Additions and minor repositioning of items were advised. A statistician also reviewed the questionnaire. The revisions were made. The nursing faculty was asked to tell the students that they would receive a questionnaire after designated class periods. Appointments were made with instructors, and a cover letter

was placed in their mail boxes regarding the appointed time and administration of the instrument. At the designated time, an oral explanation was given, and a cover letter was attached to each student's questionnaire.

Of the 196 students enrolled in the program, 169, or 86 percent, responded to the questionnaires. Twenty-seven students were absent in various classes.

Before the questionnaires were mailed to the chairpersons and distributed to the students, a code had been developed for each item. Identifying numbers were entered for each category, including the geographic location of the nursing program, i.e., urban or non-urban. Because the chairpersons' questionnaire was somewhat lengthy, each respondent had two cards. The questionnaires were numbered numerically in the order they were coded. Before the IBM cards were keypunched, each questionnaire was examined for gross errors. The keypunching was verified, and a program was written and run on the IBM computer 7094.

Analysis of the Data—
Phase I

The following data were generated by interviewing the four selected chairpersons in answer to the interview questions. (Appendix D)

When asked if their nursing programs were impacted, all four chairpersons answered "yes"; the range was from 200 to 600. When asked whether they had a problem with the applicant selection process in the department,

Respondent A said "yes," prior to implementation of the new admission criteria seven years ago. Additional comments made by the latter were:

> There were complaints from rejected applicants and the community. The community representatives were invited to give their input in formulating the new policy. All applicants must have completed all prerequisite courses with at least a "C" average or better before being considered as a candidate by the Registrar or Admissions Office. This also serves as a screening process. Applicants who applied for admission and who completed all related course requirements by the end of the school term (spring), but were not admitted to the program, will receive preferential consideration for the following fall class. If there are more qualified applicants than clinical or facility spaces, a lottery will be employed by the Admissions Office to select the appropriate number of applicants.
>
> The applicants are mature students and like the idea of having to take only nursing courses during the four semesters, which allows them time to work to support themselves and their families. The community had accepted this policy. There will always be complaints from rejected applicants.

One chairperson stated that it has been an annual problem in the past and that it was resolved by changing the admission criteria every year, using a variety of procedures. One stated that it was an annual problem and that her department could easily fill two classes. "Two slots are reserved annually for licensed vocational nurses from our sister college (Laney) and from the local Skills Center." One stated that the applicant selection process had not really been the problem; the only complaints were from rejected students.

In answer to the question, "Do you have a full-time nursing counselor to counsel pre-nursing students?", two had none; of those two, one is considering having such a counselor, and two had the use of an Allied Health Counselor. Both of the latter chairpersons felt that the above counselors were helpful to students in terms of guidance and recommending proper pre-nursing courses, but that they played absolutely no role in the applicant selection process.

In answer to the question, "Are you pleased with your present applicant selection process? If not, what changes would you make?", respondent A was pleased; the responses given for dissatisfaction with the program are presented below:

Respondent B:

> Yes, I am reasonably pleased with the present criteria. It works for this community.
>
> Special merit points are given for biological science courses, behavioral science courses and communication courses in the nursing curriculum with GPA range of 2.5-3.99. Admission to the program is highly competitive with several hundred applicants. Admission is granted to the 40 students holding the highest number of special merit points. Where there are not sufficient spaces for all candidates with an equal number of merit points, a lottery is held to determine which students will be granted admission and which will be placed on a six-member alternate list.
>
> Points are also given for previous health related employment.

Respondent C:

I have mixed feelings. The program is geared toward selecting only those who are successful. It is highly competitive. Selection is made from the highest ranking applicants, according to a point system.

All minorities are eliminated. The passing of a pre-entrance proficiency test is also required.

The college serves six upper middle class communities (Lafayette, Orinda, Walnut Creek, Concord, Pleasant Hill and Antioch), and one low-income, predominantly black community (Pittsburg).

I feel that provisions should be made to include and/or recruit qualified minority students. We are awaiting the Bakke decision about this. We can only accommodate twenty-two students. To my knowledge, no minorities have applied for this program.

Respondent D:

I have mixed feelings. The criteria have been revised over a period of several years. The faculty met with the Community Nursing Advisory Committee for their suggestions. Incidentally, the above committee consists of a representative from the Black Nurses Association, the Filipino Nursing Association, the Chicano Nurses and from various clinical agencies in the community.

Some minorities have been admitted to represent the multi-ethnic population in the community. A few have been admitted that lacked the admission requirement of completion of required courses. These students have been successful because there was total faculty commitment to assist the students as the need became apparent. However, we are awaiting the Bakke decision on the impact of ethnic admissions.

All students who are not admitted are encouraged to take additional pre-requisite courses to raise their GPA, and then reapply. Minorities and/or slower students are eventually admitted this way.

> The community nursing advisory members serve on the Nursing Faculty Admissions Committee for interviewing applicants.
>
> Involving the community for input and for assisting in interviewing applicants has been an asset in facilitating the selection process of applicants for this nursing program.

Goal direction is very important in the interview. The Bakke case referred to by the latter respondents will be discussed later in the chapter under Dissatisfied Admission Policies and Modifications Cited.

In answer to: "Do you favor the random sampling selection method of admission?":

Respondent A answered: "Yes. No school can possibly admit all who apply."

Respondent B stated: "Total random selection—no. Randomization with specific categories—yes."

Respondent C replied: "No. This would create student and community reaction."

Respondent D said: "No. It was tried for one year, and the result was a disaster for students and the community. It will never be repeated again."

Summary

The responses from the above four chairpersons about the selection process of their nursing programs facilitated the development of the chairpersons' questionnaire for this study.

PHASE I

Analysis of the Data

The population of this phase consisted of 59 chairpersons from associate degree nursing programs in California community colleges. There were 18 questions and 96 variables. The IBM 370/168 Computer at Stanford Center for Information Processing, a Campus Facility, was used to analyze the data. Two sets of procedures were used—frequency distribution and t-tests.

Frequency Distribution

Frequency distributions were obtained for responses to each item on the questionnaires for chairpersons and students. Percentages of responses were also obtained; means, medians or modes were calculated where appropriate.

t-tests

To test the four hypotheses, two measures were calculated. The proportion of oversubscription was obtained by dividing responses to question 11 (see Appendix for questionnaires) by responses to question 18 and multiplying by 100. The level of significance for the t-test was set at $p < .05$. The mean proportion of minority admissions to the institutions and to the departments was calculated by summing the proportion of Hispanic, Oriental, Black and American Indian students (question 17). Chairperson respondents were classified on the basis of response

to Question 1 as "Having an Open Door Philosophy" and "Having a Selective Policy"; questionnaires were identified as "urban" or "non-urban" prior to mailing.

Six tests were performed according to the following plan:

Test Number	Grouping Factor	Levels	Dependent Measures
1	Having an open-door policy	Yes, No	Mean proportion of oversubscription
2	Having a selected policy	Yes, No	Mean proportion of minorities admitted to institution
3	Admission policy	Yes, No	Mean proportion of minorities admitted to nursing department
4	Admission policy	Yes, No	Mean proportion of oversubscription
5	Urban/non-urban	Yes, No	Mean proportion of minorities admitted to institution
6	Urban/non-urban	Yes, No	Mean proportion of minorities admitted to nursing department

Informational Content of the Questionnaire

Data that generated nominal responses and pertained to general information about the admission policy of the 51 associate degree nursing programs were grouped together. (See Table 1, p. 54)

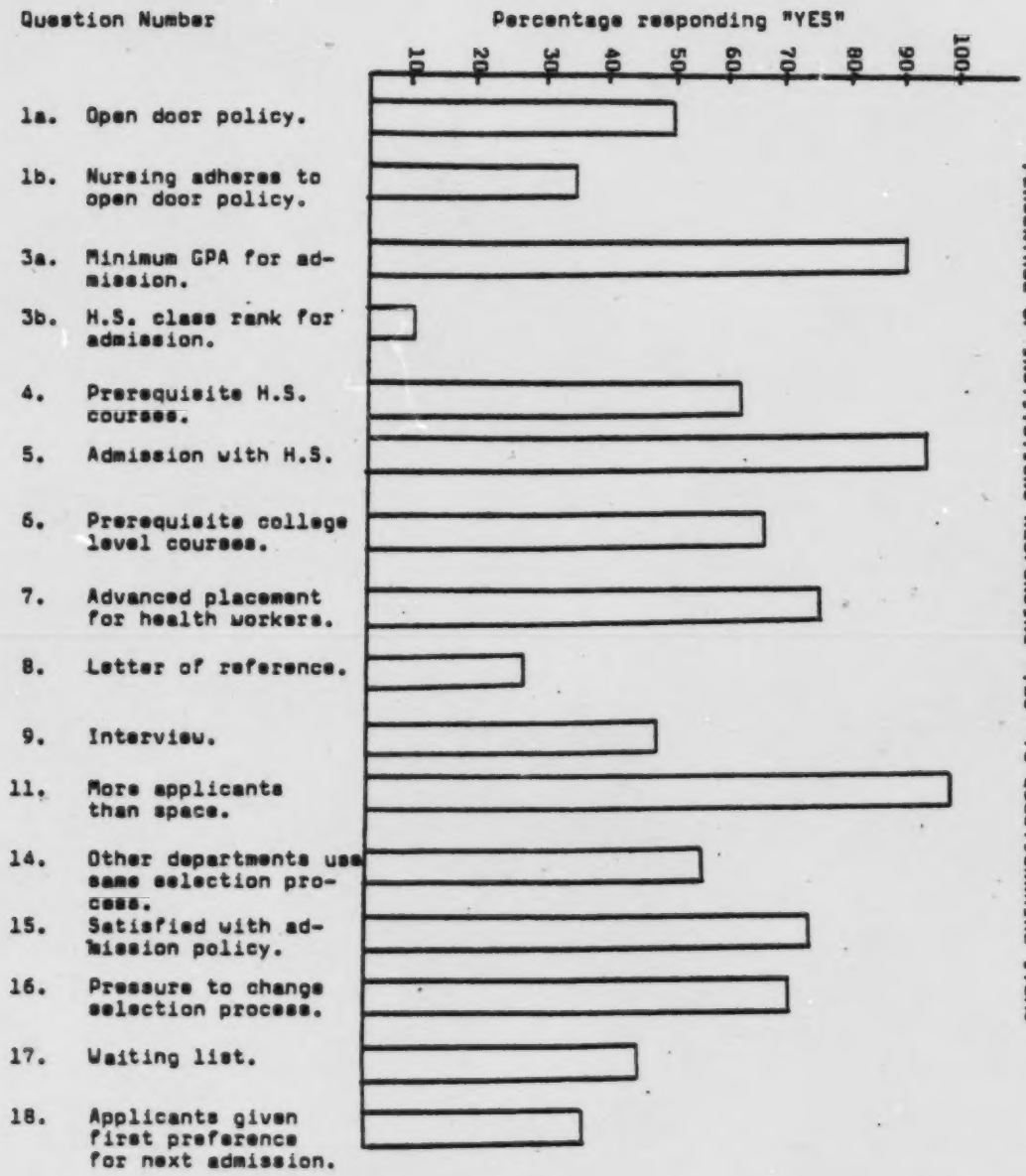

TABLE 1

PERCENTAGE OF INSTITUTIONS RESPONDING "YES" TO QUESTIONNAIRE ITEMS

Open Door Philosophy

Of the total population of 51, 25 (50%) of the nursing programs had an "open door" philosophy. One respondent added that "this means that all students must compete for the spots."

Nursing Department Adheres to Open Door Philosophy

According to the data, only 19 (38%) adhered to this policy, while 31 (62%) had selective criteria for admissions. It was not surprising in that there is a wide difference of acceptance of the "open door" philosophy in nursing schools and/or programs. The literature documents this difference.

In 1975 De Frank's survey and assessment of admission policies to resolve the problem of oversubscription of applications revealed that of the 22 respondents, only 12 tax-supported community colleges adhered to the "open dorr" concept. The reasons given for the alteration in policy were expected, however, because of national trends as described in nursing literature. The over-utilization of clinical facilities for practicum experience and the over-subscription of applicants for admission to the program were the two factors mentioned.[64]

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[64]Sister de Frank, op. cit., p. 28.

Minimum GPA for Admission

It was, in fact, quite clear that most programs are selective in admissions in that a total of 45 (90%) of the programs required a minimum GPA, as mentioned previously, even though 25 (50%) listed their philosophy as "open door."

High School Class Rank for Admission

According to the results, only 5 (9.8%) programs considered high school class ranks for admission because of the varied age groups of nursing students and the college level prerequisites of some programs. High school expectations again reflected the population of community colleges today with the large numbers of "older" students, including late careers as well as those from other careers or those already in nursing but desirous of moving along the continuum of nursing practice.

Prerequisite High School Courses

As mentioned earlier, for reasons of varied age differences and career goals of the nursing students in associate degree programs, some nursing programs no longer consider prerequisite high school courses. However, 30 (60%) considered them important. According to the data, most of the urban areas did not consider this.

Admission with High School Equivalency

Recognition of the high school equivalency certificate for admission is, in fact, a California state law, as mentioned previously. However, of the 50 respondents, 49 (98.8%) considered it, and only one (2%) did not accept it.

Prerequisite College Courses

The respondents indicated that most students are more successful in nursing if they have completed prerequisite college courses before admission. Notably, 35 (70%) of the programs require prerequisite college level courses.

Advanced Placement for Health Workers

It was clear that 41 (80.4%) considered health-related job experience as significant, while 10 (19.6%) did not. Higher total GPA average and performance in the interview were the sole criteria for the latter. Two of the chairpersons revealed that their associate degree programs accepted only qualified licensed vocational nurses with the career ladder concept.

Letter of Reference

The chairpersons' responses indicated that only a small number of programs rely on references due to biases and subjectivity even from former employers. Only 12 (23.5%) required references.

Interview

Because of the large number of applications received and the time factor that was involved for the nursing department, only a few programs hold individual and/or group interviews. A total of 14 (21.5%) had individual interviews. Only 8 (16%) held group interviews specifically for general information about the program.

Three chairpersons added that students at their respective colleges are admitted college-wide by the admission officer, and they see the students for the first time on the first day of class and/or orientation.

More Applications than Space Available

It seems evident from the data that the majority of the nursing programs were oversubscribed. Of the 51, 50 (98%) received more applicants than could be accommodated. The literature supports this oversubscription as being nation-wide rather than local or regional.

Other Departments Use Same Selection Process

Of the 51, 29 (56.9%) of the Allied Health Programs of the above specific colleges utilize the same selection process in the nursing department. This is relevant here in that other Allied Health Programs are also impacted at City College of San Francisco.

Satisfied with Admission Policy

Thirty-four (69.4%) of the chairpersons indicated that they were satisfied with their selection process, although two stated that they had mixed emotions. Fifteen (30.6%) were not satisfied with their policy.

Pressure to Change Selection Process

The literature confirmed the applicants' demand to entry into nursing programs nation-wide. Hence, 33 (64.7%) replied that they had experienced pressure to change the selection process. Four chairpersons added the following comments: "No school can accept all applicants; therefore, there will always be complaints from rejected students." Another replied that "it was the rejected applicants who initiated the cycle of complaints to the Board of Governors, legislators, media, etc."

Waiting List

A total of 18 chairpersons responded; only 6 (33.3%) placed applicants, who were not admitted, on a waiting list for the next admission. Thirty-three respondents did not answer the question.

Applicants Given First Choice for Next Admission

Only 16 (32%) gave applicants, who were not admitted to the program, first choice for the next admission, while 34 (68.0%) did not give the applicants that priority. (See Table 1, p. 54.)

The sub-topics of the above related questions were grouped together and are presented in tables below. They include:

Tests required by the college
Minimum GPA for nursing admission
High school class rank
Minimum high school GPA
Required high school courses
Prerequisite science courses for advanced placement of students with job-related experience to take challenge examinations
Source of references
Individual and group interviews
Size of group interviews
Average time of individual interviews
Number of interviewers
Interviews (major interview techniques)
More applications received annually than can be accepted
Method of handling oversubscription of applicants
Implementation of admission process
Dissatisfied admission policy and modifications listed
Pressure to change selection process
Percentage of racial/ethnic categories
Rank order of applicants placed on waiting list
Management of applicants if applicants are not admitted
Number of programs located in urban and non-urban areas
Number of respondents who requested a summary of the results of the survey

Required College Tests

Figure 1 shows that from the data obtained, it seems evident that most colleges, including institutions with an open door philosophy, entail certain tests. Of the 51, 40 (78.4%) required an English test; 33 (66%) mathematics, two (4%) a personality test; and 11 (21.6%) involved other tests.

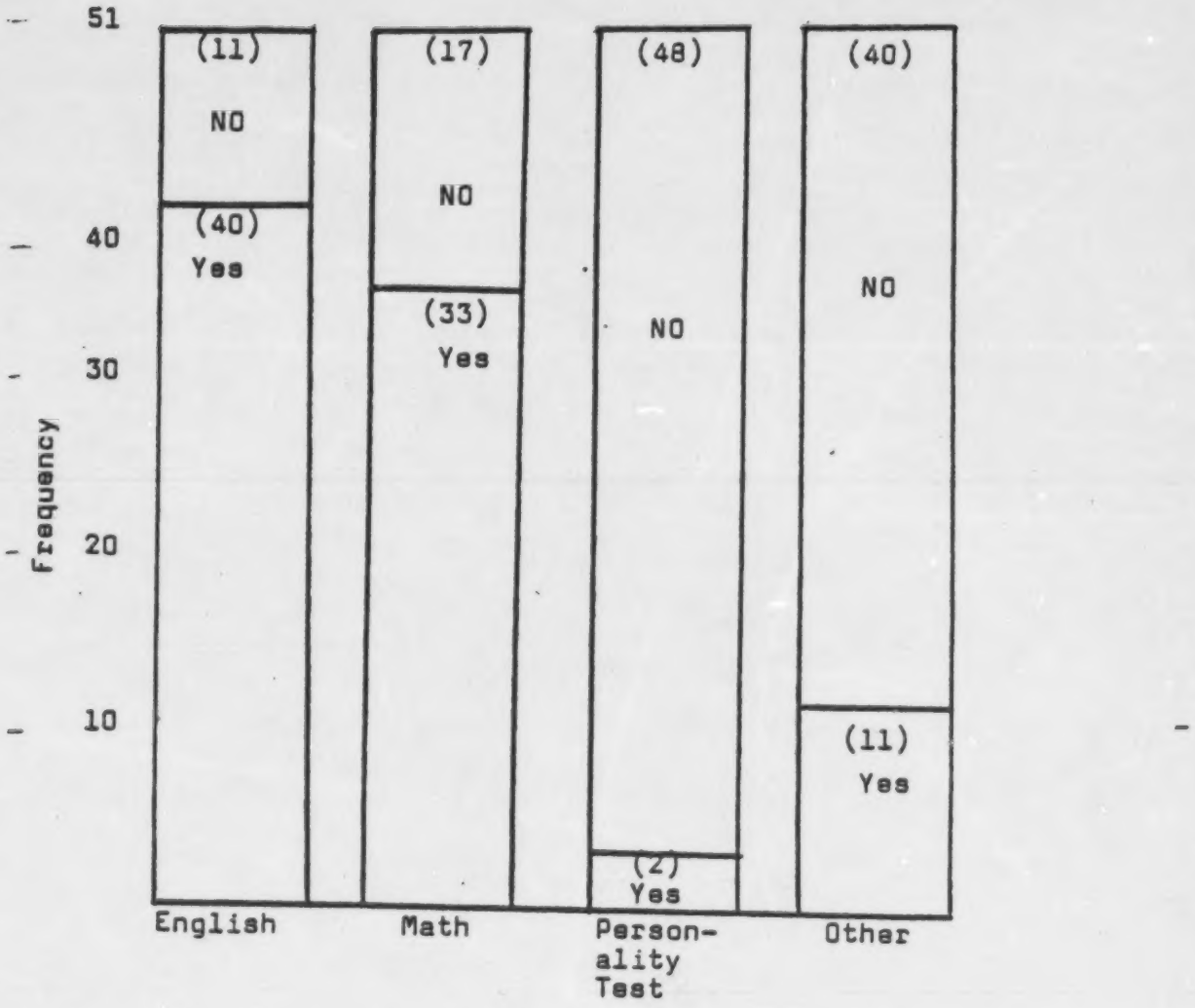

Figure 1: Tests Required by the College

Other Tests

The eleven colleges required the following measurements or a combination thereof: School and College Ability Test Series (SCAT); American College Testing Program (ACT), Reading Comprehension and Social Sciences. These tests are shown on the following page in Table 2.

TABLE 2

OTHER TESTS

Number of Colleges That Required Tests	Tests
9	SCAT
3	ACT
1	Placement
2	Reading Comprehension
1	Social Sciences

Additional Tests Required by Nursing Program

In addition to the tests required by the colleges, 29 (56.8%) of the 51 nursing programs included other measurements. They are reported in Table 3.

It may well be that some institutions' policies provide an "open door" to the college, but not to all technologies until specific criteria determined by the department are met.

TABLE 3

ADDITIONAL TESTS REQUIRED BY SOME NURSING PROGRAMS

Tests	Number of Nursing Programs that Required Tests
SCAT - II Quantitative	6
SAT	1
ACT	3
NLN-PNG*	3
Nursing Math Proficiency	7
Personality	3
Written Medical-Surgical Proficiency	1
Kuder-Watson	2
Oral Exam During Interview	1
Skills Laboratory Proficiency	1
Physical Health	1
Total	29

*NLN-PNG = National League of Nursing/Prenursing Aptitude Guidance Test

A Master's thesis done in 1961 on selection and admission criteria in relation to other variables found that 44 junior college nursing programs in the United States employed the following tests in the selection process:

-School and College Ability Test Series (SCAT)

-College Entrance Examination Board's Scholastic Aptitude Test (SAT)

-American College Entrance Test (ACE)

-American College Testing Program (ACT)

-National League for Nursing, Pre-Nursing and Guidance Test (NLN-PNG)

-Psychological Corporation Aptitude Test for Nurses (Psyc. Corp.)[65]

Table 4 shows that of the 51 chairpersons queried on the question of required minimum GPA for nursing admission, 45 responded. More importantly, despite the oversubscription of applicants, it illustrates a GPA range from 2.0 to 3.0, with the majority of the programs, 27 (60%) requirement of a 2.0 while only 2 (4.4%) required a 3.0. Notably, in nursing some kind of objective selective criteria were used to determine candidates for admission, regardless of the college's philosophy.

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[65]Margaret Thelander, "A Study of Selection and Admission Criteria in Relation to the Attrition Rates of Freshmen in Educational Programs of Nursing Leading to the Associate Degree" (unpublished Master's thesis, University of Alabama), p. 4.

Minimum High School Class Rank and GPA

Only 6 (10%) respondents indicated that high school class rank was considered in the admission criteria. Forty-five did not answer the question.

Table 5 shows the 11 schools that make allowance for high school GPA.

TABLE 4

ADMISSION GPA

Range	Frequency	Adjusted Frequency Percentages
2.0	27	60
2.2	1	2.2
2.5	14	31.1
2.7	1	2.2
3.0	2	4.4
999.0*	6	Missing
Total	51	100.0

*999 - Missing cases

TABLE 5

MINIMUM HIGH SCHOOL GPA

Range	Frequency	Adjusted Frequency Percentages
2.0	4	36.4
2.5	3	27.3
3.0	4	36.4
999.0*	40	Missing
Total	51	100.0

*999 - Missing cases

Required High School Courses

As previously mentioned, the data illustrated the significance that some associate degree programs place on high school courses. The highest priority was given to chemistry. Of the respondents, 62.7% require it; for algebra, only 25.5%, 20.4% for biology, and 13.7% include mathematics. Only one other program included English proficiency and a laboratory science course. (See Table 6.)

TABLE 6

REQUIRED HIGH SCHOOL COURSES

Category Label	Frequency	Adjusted Frequency Percentage
Biology		
No	39	79.6
Yes	10	20.4
No Response	2	—
		100.0
Chemistry		
No	19	37.3
Yes	32	62.7
No Response		—
		100.0
Mathematics		
No	44	86.3
Yes	7	13.7
No Response		—
		100.0
Algebra		
No	38	74.5
Yes	13	25.5
No Response		—
		100.00
Physics		
No	51	100.0
Yes	—	—
No Response	—	—
		100.00
Other Courses		
No	50	98.0
Yes	1	2.0
No Response	—	—
		100.00

Required Prerequisite College Level Courses

TABLE 7

PREREQUISITE COLLEGE COURSES FOR ADMISSION TO NURSING PROGRAM

Prerequisite	*#Yes	**%Yes	#No	%No	Total N***
Anatomy	23	45.1	28	54.9	51
Chemistry	22	43.1	29	56.9	51
English	13	26.0	37	74.0	50
Microbiology	25	49.0	26	51.0	51
Psychology	12	24.0	38	76.0	50
Physiology	14	28.0	36	72.0	50
Sociology	11	22.0	39	78.0	50
Speech	12	24.0	38	76.0	50
Others	41	89.1	5	10.9	46

*# = Number
**% = Adjusted Frequency Percentage
*** = Number

In essence, the reporting of the data in Table 7 revealed that the majority of programs do not require prerequisite courses, and it implies that the students may take the above courses concurrently with nursing courses. However, 15 respondents who do not require prerequisites wrote on the questionnaires that the applicants are not considered for admission unless they have completed either all of the above courses or at least anatomy, physiology, chemistry and microbiology. The science course requirement is relevant here in that nursing students must be

able to understand the normal functioning body processes in order to relate them to the pathophysiology or disease process.

Other Prerequisite College Courses Listed by the Respondents

Nursing students must be able to compute drugs and solutions mathematically. Notably, 41 (89.1%) required other college prerequisites, with 37 (74%) demanding mathematics. They are summarized as follows: four programs included algebra; two, biology; one, an eligibility course for English 1A; one, governance; one, 15 units of social sciences; 37, mathematics; two, nutrition; one, 10 units humanities; and one, zoology.

More significant is the fact that the respondents favor and utilize primarily objective measures of academic success, future or potential, for selective admission policy. Franklin (1975) documented that selectivity is on the basis of academic or intellectual qualities in many colleges with or without nursing programs.[66]

Prerequisite Science Courses for Advanced Placement of Students with Job-Related Experience to Take Challenge Examination

As mentioned earlier, all of the 32 respondents who answered the above question considered the completion

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[66]Franklin, p. 12.

of specific science courses important for applicants who wish to challenge examinations and acquire advanced placement because of previous health-related job experience. The California State Law and the career ladder concept make provisions for the above applicants. The applicants may challenge the first year of nursing courses. The two courses are Nursing Fundamentals and Basic Medical Surgical Nursing. If successful in each, they are advanced to the second year status and can complete the program in one year. Therefore, it is imperative that the applicant have the scientific background before advancing to the complex nursing course.[67]

Three of the respondents added that these programs were a career ladder concept and were limited to accepting licensed vocational nurses for the above challenge examinations. Table 8 reports the particular courses.

TABLE 8

PREREQUISITE SCIENCE COURSE REQUIREMENTS FOR STUDENTS WITH JOB-RELATED EXPERIENCE

Prerequisite	*#Yes	**%Yes	#No	%No	Total N***
Anatomy	31	63.3	18	36.7	49
Microbiology	27	55.1	22	44.9	49
Physiology	34	68.0	16	32.0	50

* = number ** = adjusted frequency pct. *** = number

[67]California State Department of Consumer Affairs, op. cit.

Preference of Source for Letter of References

As stated previously, only 12 (23.5%) programs included a letter of reference as part of the admission criteria due to subjectivity.

Of the 12 that responded, 10 (19.6%) preferred a letter from an employer, and 8 (15.7%) from a former teacher, while only 2 (3.9%) from a minister.

Three (5.9%) listed "other sources" acceptable for references. They are: a doctor, an attorney, and supervisors of licensed vocational nurses.

One chairperson added that where references are submitted to the department, they must be on a form provided by the program, and the writer must address specific characteristics about the applicant.

Individual and Group Interviews

Size of the Group and Average Time for Each Interview:

The excessive number of applications beyond the number of applicants that can be accepted in nursing programs, the non-objectivity and the time factor that it involves apparently demonstrate why only a small number of programs require interviews. For example, of the 51, 14 (27.5%) include individual interviews, while only 8 (16.0%) entail group interviews for information only. The 14 respondents for individual interviews indicated that the average time ranged from 15 to 30 minutes. While the 8 who replied to group interview allocated a range of

15 to 60 minutes, the size of the group varied from 5 to 9 applicants, and the number of interviewers ranged from one to 9.

Who Were the Interviewers?

In some programs, interviews for nursing are done by the nursing faculty and/or counselors.

The data revealed that interviewing was done by 18 (35.3%) of the nursing faculties and 12 (23.5%) of counselors. In addition, 6 (11.8%) "other interviewers" were listed, as: only the chairperson of the department; admissions committee made up of nursing faculty and counselor; a combination of the latter plus community advisory members and the local health agencies' representatives; college administration and college health center nurses; nursing faculty, community representatives, and current student body representatives; nursing faculty, community representatives (e.g., a member from the Black Nurses Association, the Filipino Nurses Association, and the Chicano Nurses Association), as well as students; and nursing faculty counselor, science and/or mathematics teachers.

Major Interview Techniques

The major interview techniques used were diversified. Respondents listed the following methods: informational, with time allocated for questions and answers; follow a routine form (structured question and answers of

each applicant; emphasis on related job experience, organization and planning, GPA of prerequisites, all done on a point system evaluation of a written paragraph on career goals using a 1-5 scale grading system; all applicants must attend a once-only nursing seminar entitled, "Orientation to Nursing Career," which consists of essential information about nursing. At the end of the seminar, applicants are asked to fill out a questionnaire (which is worth 10 points) regarding previous patient care, and why they have chosen nursing. Applicants are then screened on a point system; GPA and completed prerequisite courses are considered; interviewers assess general presentation and appearance, self-image, discuss general health, and give the applicants information about the program. Some questions are asked of each applicant; three interviewers score independently on a scale of 1-5; applicants are informed in advance on the nature of the interview and the questions; and Rogerian and direct combination of questions and techniques are used.

To summarize, the apparent lack of significance that the majority of nursing programs placed on references and interviews, even though they are requested, has been validated by Taylor and other studies; but the value placed on them in the admission process varies considerably.[68]

Franklin (1975:13) commented that the interview and

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[68]Taylor, op. cit., pp. 7, 9.

references, while still used by many schools, seem to have fallen into some disfavor as predictors of success. Their usefulness as valid predictors has been repeatedly challenged, and it almost seems as if many nursing schools carry out the procedure of requesting them only as a matter of habit. It is doubtful whether much attention is paid to them.[69]

Fox (66:246) contended that when techniques such as face-to-face interviewing are used, there is ample research to indicate that variables of age, sex, race and manner of dress of the interviewer all can affect the data obtained, and, if the interview must judge the nature of the observed behavior, objectivity is at issue.[70]

How Many More Applications are Received Annually Than Can Be Accepted?

From Table 9, it is clear that of the 47 respondents who answered the question, all programs showed varying degrees of oversubscription and variations from one program with 8 to an overwhelming 600. This confirmation occurred in nursing programs in urban and non-urban areas. The National League for Nursing annual survey also supports the oversubscription and the levels of variation.

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[69]Franklin, op. cit., pp. 13, 28.

[70]David J. Fox, Fundamentals of Research in Nursing (New York: Appleton-Century Crofts, 1966), p. 246.

TABLE 9

THE EXCESS NUMBER OF APPLICATIONS
RECEIVED ANNUALLY

Applications	Frequency	Adjusted Percentage
8	1	2
20	2	4
60	1	2
72	1	2
100	6	13
114	1	2
120	1	2
130	1	2
140	1	2
150	2	4
160	1	4
185	1	4
200	11	23
250	2	4
270	1	2
300	2	4
350	2	4
366	1	2
375	1	2
400	3	6
450	1	2
500	2	4
540	1	2
600	1	2

Valid cases - 47
Missing cases - 4
51

We postulated that the main influence delaying a zero growth rate in admissions to nursing education programs was demand for entry into nursing school. The data support this demand: there are more applicants for admission than there are places for students, perhaps as much as two to one in associate degree and diploma programs.

There are regional variations in the level of demand.[71]

Method Employed for Handling Oversubscription of Applicants

Table 10 reveals that there was not a consistently or overwhelmingly preferred method for handling oversubscription of applications. There were several who indicated a combination of the criteria utilized. College GPA and GPA for required nurses' courses appeared to be used more commonly than the other methods.

TABLE 10

THE METHODS USED FOR HANDLING OVERSUBSCRIPTION OF APPLICATIONS

Method	#Yes	%Yes	#No	%No	Total N
Random Selection	15	29.4	36	70.6	51
Highest Score on Required Entrance Test	12	23.5	39	76.5	51
Performance in Interview	7	13.7	44	86.3	51
High School Performance	11	21.6	40	78.4	51
College GPA	26	51.0	25	49.0	51
GPA—College Courses Required for Nursing	28	54.9	23	45.1	51
First Come, First Served	9	17.6	42	82.4	51
Select Quota of Applicants from Predetermined Groups	1	2.0	50	98.0	51

[71] Walter L. Johnson, "Educational Preparation for Nursing, 1976," Nursing Outlook (September, 1977).

Other Pre-Determined Methods Employed

Of the 51, 12 indicated other procedures which are listed below as presented in the data:

Two—utilized the process of reapplication.

Three—employed a waiting list.

Two—used random selection from those who meet the requirements.

Other methods were:

A point system—a maximum of 80 points given for completion of all required prerequisite nursing and general college courses (A = 12, B = 10, C = 8).

A screening form point system for academic and related work experience.

A point system (maximum of 80) earned for all college level pre-requisite nursing courses (A = 35, B = 25, C = 20).

Seventy-five percent of weight given for high school and college, GPA, 25 percent of weight given for related work or volunteer experience.

A minimum GPA of 2.0, and ACT of 32 or above.

Admission Process Totally Implemented by Department of Nursing, Counseling, Registrar's Office, and Admissions Committee

Only 16 nursing programs carried out the selection process in its entirety. Twenty-six employed a combination of nursing faculty, counseling, and the admissions committee. Two of the latter respondents indicated that it was

important to include a variety of people or disciplines in order to be as objective as possible. In 17 colleges the registrar's office admitted all students in all departments college-wide, as shown in Figure 2.

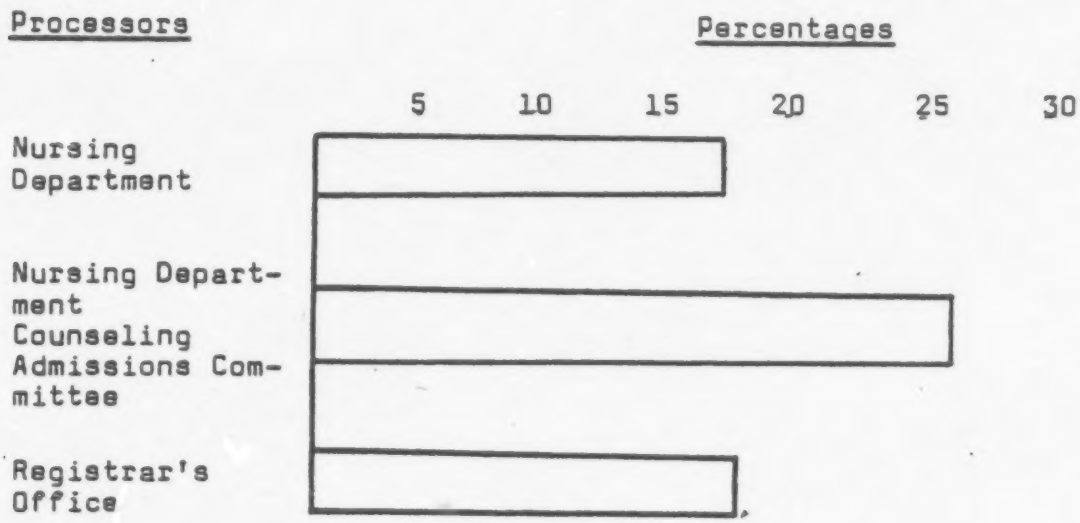

Figure 2: Admission Process Implemented by Nursing, Counseling, Registrar Admissions Committee

Experience of Pressure on Selection Process from Community Groups

Inquiry was further made to elicit information regarding outside reactions to the admission policies of the nursing programs. Only 18 chairpersons indicated that there was no reaction to the one they utilized. The following table summarizes the pressure groups.

TABLE 11

OUTSIDE PRESSURE ON SELECTION PROCESS
FROM COMMUNITY GROUPS

Category Label	#Yes	%Yes	#No	%No	Total N
Rejected Applicants	18	35.3	33	64.7	51
Board of Governors	29	56.9	22	43.1	51
Community Representatives	8	15.7	43	84.3	51
Legislators	13	25.5	38	74.5	51
College Administration	7	13.7	44	86.3	51
News Media	9	17.6	42	82.4	51
Local HEW Office	4	7.8	47	92.2	51
Affirmative Action Officer	2	3.9	49	96.1	51

In light of the local reaction of the Board of Governors, rejected applicants, legislators, news media and college administration, it would seem of interest to ascertain which policy systems brought reaction from each of these sectors. Only 2 listed "other outside pressure groups."

Dissatisfied Admission Policies and Modifications Cited

Table 1, as previously mentioned, pointed out that of the 51 respondents, 47 answered the question. Of the 47, only 12 reported dissatisfaction with the process presently employed. However, there were mixed reactions. At least one chairperson was unable to answer since "this

will be our first time to use random selection. Until this fall it has been on a first-come, first-served basis."

The reasons stated for the dissatisfactions were varied but interrelated. They are reported below:

"The admission criteria will be re-evaluated after testing this spring; would like to see a greater spread in the point system."

"The minimum GPA of 'C' should be raised to 'C+,' then develop a point system using the present criteria."

"We need to establish a basic cut-off point on the tests, and delete the extra points offered for bilingual capabilities."

"There should be more selectivity by establishing minimum requirements and utilizing a point system for priorities."

"We would like to determine our own autonomous criteria. At present, all four nursing programs in the Los Angeles Community College District are governed by the same process."

"Utilize interview and mandatory health occupation experiences to reduce attrition. Continue to refine present policy each spring."

"Weighting and criteria needs refinement. Since it does not include a subjective factor, we are considering a personality indicator."

"Employ random selection of qualified candidates and omit interviews."

"Would like less restrictions and more open door approach. Perhaps a point system or a waiting list should be considered."

"Utilize more objective criteria. Place more value on test scores."

"Require completion of all college level pre-requisite nursing courses."

"Criteria should be determined by the District Board in cooperation with the director of four other nursing programs in the district, utilizing a point system geared to each specific program."

"Employ the NLN (National League for Nursing's pre-entrance test) for screening applicants."

As mentioned earlier in the chapter, two respondents had mixed feelings about their admission standards:

"Not sure of how the Bakke decision will affect minority admissions and our commitment to the community."

The Bakke decision mentioned above refers to Bakke versus the Regents of the University of California. Allan Bakke, plaintiff, a Caucasian, was rejected for admission to the University of California at Davis Medical School, which is supported by public funds, in 1973 and 1974. He charged that he would have been admitted if it had not been for the school's practice of reserving 16 of its 100

entering class spots for "disadvantaged students." There were 2,644 applicants for the 1973 entering class and 3,737 for the 1974 class. Only 100 places are available each year, of which 16 are filled under the special admissions program in dispute. Applicants for the remaining 84 places are chosen by recourse to the normal admission process. Bakke successfully argued before the California Supreme Court that those students selected for the special admissions programs were less academically qualified than he and that he was a victim of racial discrimination. The Regents of the University of California appealed the California court ruling that he be admitted to medical school.

The case is now pending before the United States Supreme Court.

The University's position was that it "has the right and the responsibility to pursue its own volition to provide for effective integration of its student body."[72]

After analyzing the above data, it appeared evident that of the 12 respondents who offered modifications for their unsatisfactory admission practices, 10 supported

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[72]Supreme Court, In the Supreme Court of the State of California. In Bank, San Francisco, California 23311 (Super. Ct. No. 31287) Allan Bakke, Plaintiff, versus the Regents of the University of California, Defendant, filed 9/16/76, pp. 1-2. A copy.

selective criteria. This point of view is confirmed in the current literature.

Franklin (73:11) stated that admission people, who favor a selective admission policy, favor practices which, in some way, utilize primarily objective measures of academic success, future or potential, to avoid attrition.[73]

Lande (74:54), in a national study of nursing programs in junior colleges, concluded: "As their major reasons for rejecting an applicant, the majority of programs identified education-related factors such as low academic standing, low pre-entrance test scores and lack of academic qualifications such as chemistry, mathematics, etc."[74]

Percentage of Racial/Ethnic Categories in Institutions and Nursing Departments

The above subtopic was included to determine the distribution of minority students among all students in associate degree nursing programs in California. The number of returned questionnaires that included the information was quite variable. One respondent wrote that students are not asked to list their racial/ethnic

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[73]Franklin, op. cit., pp. 10-11.

[74]Sylvia Lande, A National Survey of Associate Degree Nursing Programs, 1967 (New York: National League for Nursing, 1967), p. 54.

background. Ten wrote that they did not have access to the information. Some reported the nursing students but omitted the ratio of the institutions.

Figure 3 shows the percentage of admissions (see page 85).

Figure 4 points out the same outstanding variation in the differences in schools reporting racial/ethnic enrollment of students to the nursing program. It was found that, of the reporting respondents, there was a total of less than 20 percent of minorities enrolled in associate degree programs in California in contrast to the Caucasian admission of 84.88 percent.

The above disclosure does not support the findings by the National League for Nursing in the study, "Educational Preparation for Nursing—1975." The differences cited in the response problem were:

> First, without exception, larger proportions of RN basic programs have reported admitting, enrolling, and graduating more men and minority students than have practical nursing schools. This is not unexpected, however, for the geographic areas from which RN students are drawn are usually larger and have more diverse populations.
>
> Secondly, within the RN universe, the internal variations are substantial. Usually, though not always, the highest proportions of nursing enrollments, admissions, and graduations of minority students are found among baccalaureate programs. Associate degree programs are a close second, while diploma programs are without exception the lowest. Probably the same forces relating to geographic areas and diversity of populations are responsible for the differences here.

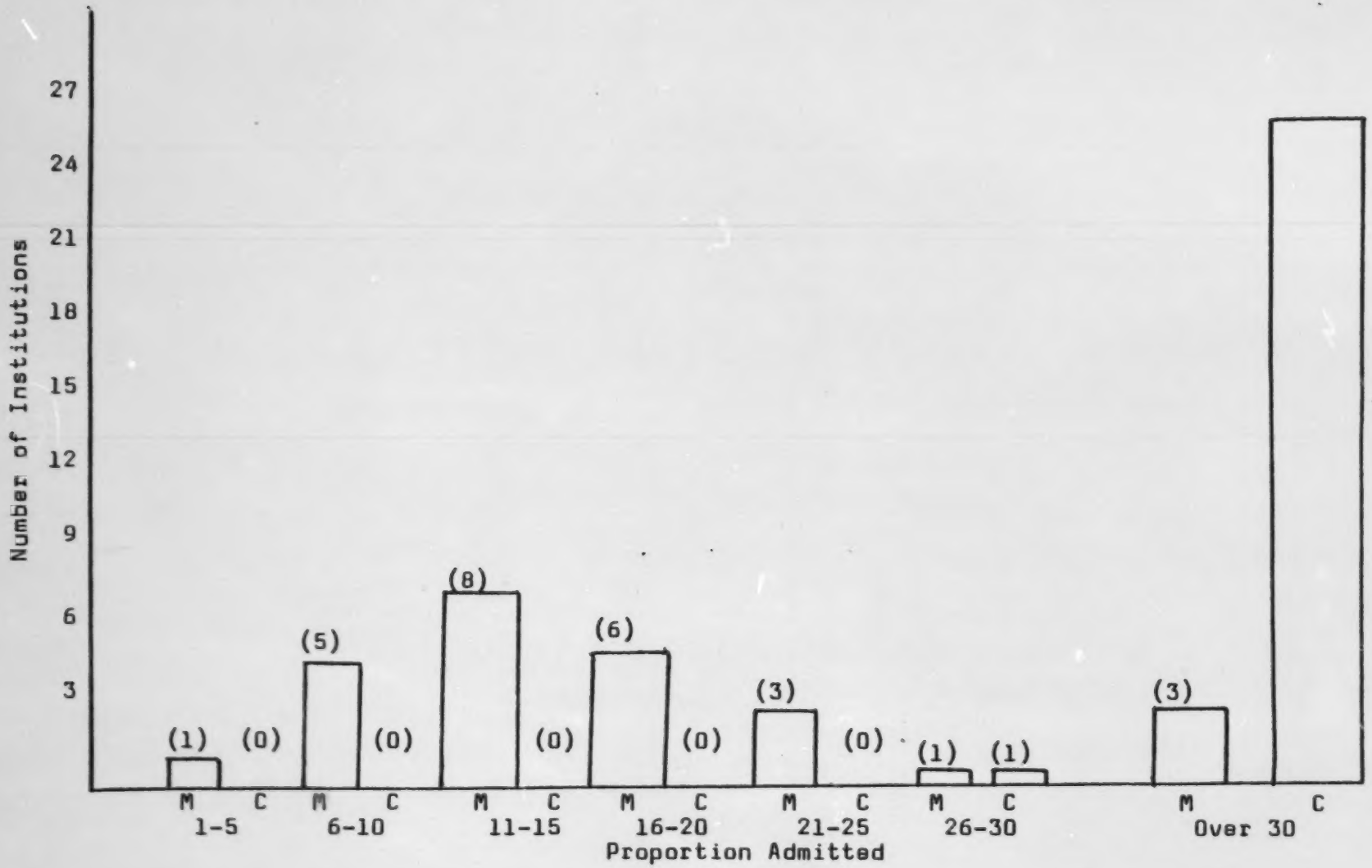

Figure 3: Number of Institutions Admitting Different Proportions of Minorities and Caucasians.

98

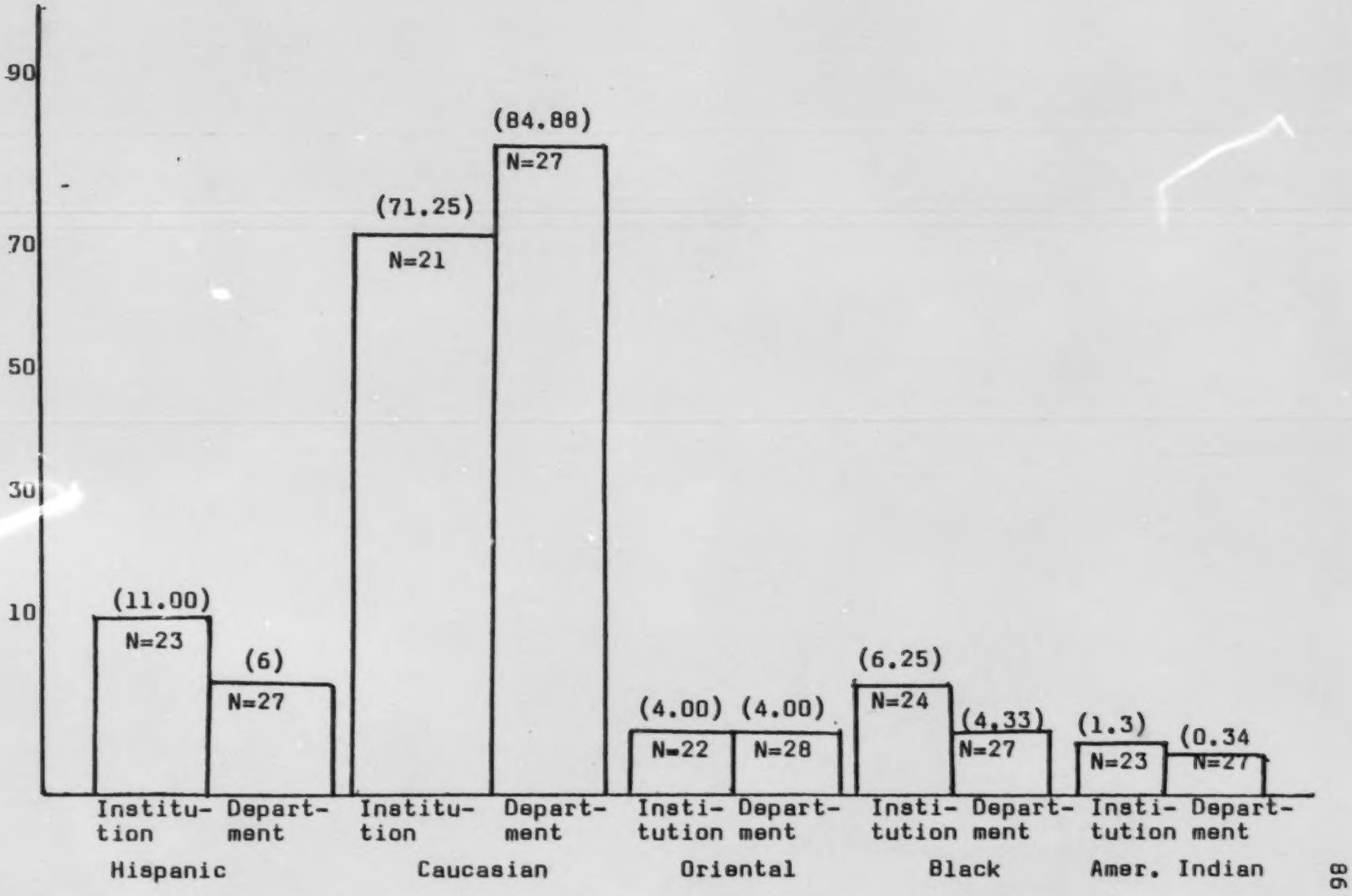

Figure 4: Graph of Median Percentage of Students Within Different Racial/ Ethnic Categories Enrolled in Institution, Department

> Third, invariably, larger proportions of schools report more minority students enrolled than admitted or graduated. This may be no more than an artifact of the cumulative impact of enrollments; admissions over several years may be mirrored in enrollment counts for a given year.
>
> Generally speaking, the changes between 1972 and 1975 are quite modest, with proportional gains in a given instance but with some losses as well. We would call attention especially to the drop in proportion of blacks admitted, enrolled, and graduated in associate degree programs and practical nurse programs. A counterbalancing influence is the gain seen in baccalaureate associate degree programs.[75]

Perhaps the most significant variations shown below in Table 12 are the small differences between the dependent variables. For example, the mean difference between oversubscribed nursing programs utilizing open-door philosophy from those with selective policies is only .15. The mean difference between oversubscribed programs located in urban areas from non-urban areas is .39.

The mean difference between minority admissions to nursing programs with an open-door philosophy from those with selective policies is .04.

The mean difference between minority admissions to nursing programs located in urban areas from those in non-urban areas is 0.

Order of Accepting Applicants Placed on Waiting List

Table 13 below identifies the order in which the respondents indicated how oversubscribed applicants were managed. Specifically, the highest priority was given to ranking examinations and GPA. There were 37 valid cases.

TABLE 12

THE MEAN PROPORTION AND STANDARD DEVIATION
FOR OVERSUBSCRIPTION AND
MINORITY ADMISSIONS

Measure	Group	N	Mean	S.D.
Proportion	Overall	45	3.55	2.02
Oversubscription	Policy:			
	Open Door	23	3.63	2.47
	Selective	22	3.48	1.56
	Location:			
	Urban	17	3.31	1.42
	Non-Urban	28	3.70	2.33
Proportion	Overall	27	.19	.15
Minority	Policy:			
Admissions	Open Door	10	.17	.08
(Department)	Selective	16	.21	.18
	Location:			
	Urban	12	.19	.19
	Non-Urban	15	.19	.11

TABLE 13

RANK ORDER OF MANAGING OVERSUBSCRIBED APPLICANTS

Method	Code	Frequency	Adjusted Percentage
Rank - GPA	1	9	24.3
Rank - Exams	2	16	43.2
1st Come	3	4	10.8
Random Selection	4	2	5.4
1 and 2*	5	3	8.1
Reapply	7	1	2.1
No. on Application**	8	1	2.7
Combination of above	9	1	2.7
	999	14	Missing
Total		51	100.0

*1 and 2 = GPA & Exams
**No. = number

How Applications are Handled If Not Given First Preference On the Next Admission

Since there were only six respondents who reported a waiting list and only 16 who gave the applicants first preference for the next admission (see Table 1), the above inquiry attempted to ascertain how the other programs handled the excess applications. Reapplications and qualification and use of a point system were considered the most significant ways, as seen in Table 14.

TABLE 14

TREATMENT OF APPLICATIONS NOT GIVEN FIRST PREFERENCE ON NEXT ADMISSION

Method	Code	Frequency	Adjusted Percentage
Reapplication	1	22	52.4
Qualifications and Number on Applications	2	13	31.0
Point System	3	4	9.5
Weighted	4	1	2.4
Reapplication *P.	7	1	2.4
Combination**	9	1	2.4
	999	1	Missing
Total		51	100.0

*P = Persistent
** = Combination—by the above methods.

Of the 51 respondents, 48, or 94.1%, requested a summary of this study.

Summary of Phase I Analysis

Associate degree nursing programs in California were subjected to the same overwhelming demands for admission by prospective students as were all other collegiate institutions today. Bound by an educational philosophy which dictated that the widest possible segment of the community must be served, the community colleges have been

particularly challenged by the problem of who could profit the most by their vocational programs. It was this excess of demand over available places and the desire of the nursing programs to admit those students who indicated reasonable chances of successful completion of the course that has led many institutions to seek criteria that would best forecast a student's success in the program.

Analysis of the Data—Phase II

The current student body (196) of the nursing program at City College of San Francisco made up the population for this phase. There were 16 variables in the questionnaire. The IBM 370/168 computer was used to analyze the data.

The student body's response on the selection process is reported below, as it was presented in the questionnaires.

TABLE 15

PROFILE OF STUDENT BODY INPUT ON THE SELECTION PROCESS

Question Number	Informational Content of Questionnaire	#Yes	*%Yes	#No	%No	Total N
1.a.	Are personal interviews necessary?	144	85.2	25	14.8	169
1.b.	If yes, should information given in interview be validated?	68	40.2	101	59.8	169
1.c.	If no, should personal interview be held for information only?	38	22.5	131	77.5	169
2.a.	In favor of point system whereby priority would be given for health-related job experience?	126	74.6	43	25.4	169
2.b.	For bilingualism?	89	52.7	80	47.3	169
2.c.	For socio-economically deprived?	77	45.6	92	54.4	169
3.	Completion of all pre-requisite and general education courses.	110	65.5	58	34.5	168
4.	In favor of random selection?	32	18.9	137	81.1	169
5.	Hire full-time counselor for pre-nursing and nursing students	151	89.3	18	10.7	169
6.	Increase qualified minority enrollment	127	75.1	42	24.9	169

TABLE 15 (continued)

Question Number	Informational Content of Questionnaire	#Yes	*%Yes	#No	%No	Total N
7.	Minority student?	58	34.3	111	65.7	169
8.	Accepted in nursing program after first application	86	50.9	83	49.1	169
9.a.	Associate Arts degree	40	23.7	129	76.3	169
9.b.	Baccalaureate degree	33	19.5	136	80.5	169
9.c.	Master's degree	2	1.2	167	98.8	169
10.	Validate residency?	68	40.2	101	59.8	169

* = adjusted percentage

Summary of Data

See page 94 for Table 16, Students' Evaluation: Use of Interviews as Part of Selection Criteria.

TABLE 16

STUDENTS' EVALUATION: USE OF INTERVIEW AS PART OF SELECTION CRITERIA

Response Profile		Adjusted Frequency %	Number of Respondents
Personal Interviews			
	YES	85.2	144
	NO	14.8	25
		100.0	169
Validate Information			
	YES	40.2	68
	NO	59.8	101
		100.0	169
Information Only			
	YES	22.5	38
	NO	77.5	131
		100.0	169
	TOTAL	100.0	169

Interviews

Table 16 points out the significance of personal interviews to students. Of the 169, only 25 considered it unimportant. Notably, 101 did not feel that information given in an interview should be validated. Two students wrote the following comments:

> Employ personal interviews, and observe the positive and negative feedback from the applicants. For example, "Does the applicant want to become a nurse because he/she is interested in serving and caring for humanitarian needs?"

Or is he/she interested in nursing because it is a viable profession and employment is usually accessible? This could serve as a screening tool.

Point System for Health-Related Job Experience, Bilingualism, and Socio-Economically Deprived

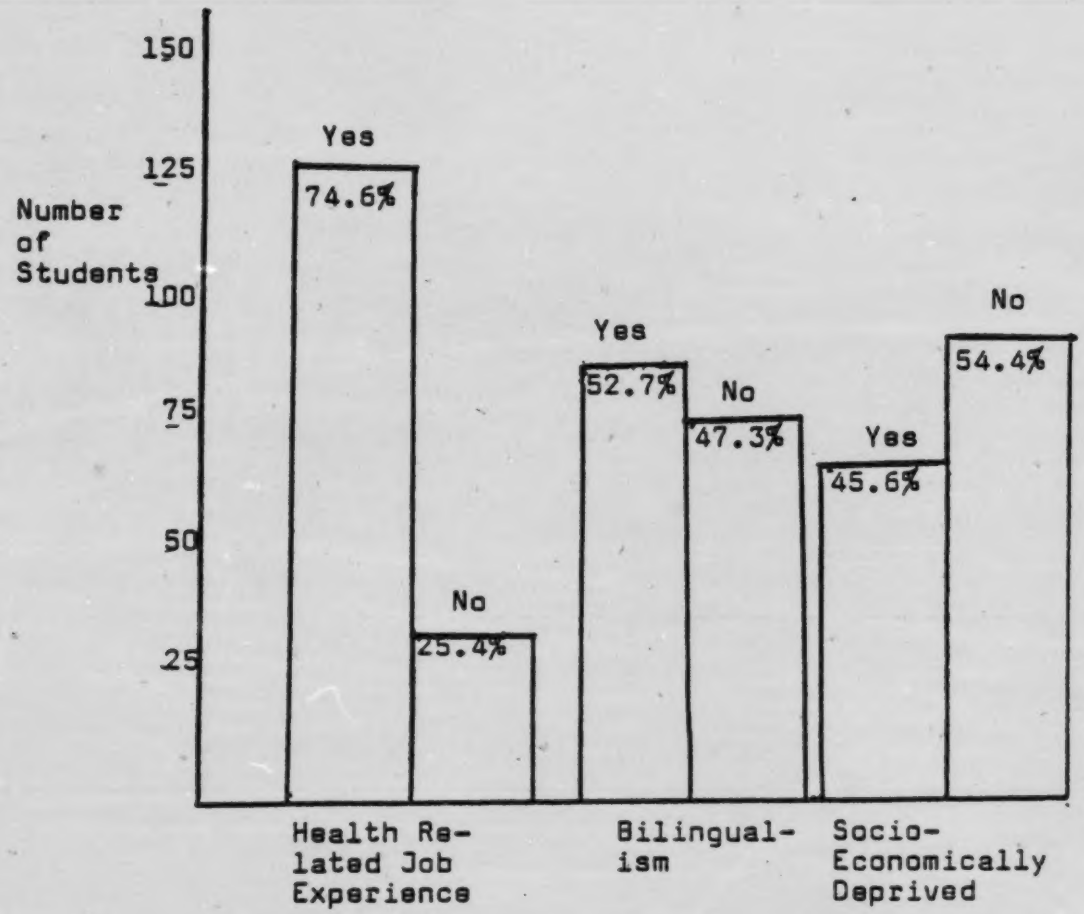

Figure 5: Student Response for Utilization of a Point System and Priorities

Figure 5 identifies the students' priority for establishing a point system. Seventy-five percent felt that job-related experience is indicative of the

seriousness of a student's intent to fulfill an educational goal and the career ladder concept. Only 52.7 percent indicated support for bilingualism, while 54.4 percent disagreed with consideration for the socio-economically deprived. One respondent wrote that students in the latter status should be considered only if qualified academically. Other comments were:

> Students with job-related experiences are fully aware of the demands that nursing requires and it shows that they wish to upgrade themselves.
>
> Students with work-related experience and the required GPA should have priority.

It would appear from the above Figure 5 that the primary weight was given to health-related job experience.

Methods Listed for the Validation of Health-Related Job Experience, Bilingualism and the Socio-Economically Deprived

Of the 169 respondents, 27 answered this open-ended question as follows:

a) Health Related Job Experience

Require reference letters from present and/or former employers or supervisors; if L.V.N., Licensed Vocational Nurse, show proof of current registration; L.V.N.s should be given more priority; consider up to 10 years of experience as the maximum amount of credit.

b) Bilingualism

Determine proficiency of a foreign language by oral and written tests prepared and administered by the language department as it was done last spring (1977); restrict the credit and tests to the most commonly used foreign languages in San Francisco, i.e., Spanish, Oriental, French and Italian.

c) Socio-Economically Disadvantaged

Require W-2 tax return statements for proof of income; medical cards; eligibility (social worker), worker's verification preference; if applicant lives with parents, ask for his/her tax returns, number of dependents, and number and amount of others contributing to income; consider the geographic area or location where the individual grew up; use the same forms and procedure as the college Financial Aid Office.

TABLE 17

STUDENT EVALUATION OF TASK CATEGORIES

Response Profile		Adjusted Frequency %	Number Responses
Completion of all pre-requisites & G.E. courses*	YES	65.5	110
	NO	34.5	58
		100.0	168
Random selection	YES	18.9	32
	NO	81.1	137
		100.0	169
	Total	100.0	169

*G.E. Courses = General Education Courses

As shown in Table 17, 110, or over 65 percent of the respondents, gave a positive reply for requiring applicants to complete all prerequisite and general education courses before admission. More important was the 81.1 percent response of those who disapprove of the random selection process of admission.

In Favor of Hiring Full-Time Counselor for Pre-Nursing and Nursing Students, Increasing Enrollment of Qualified Minorities and the Number of Minorities Enrolled

Figure 6 indicates the distribution of responses to the above questions. One hundred fifty-one, or 89.3 percent, found the hiring of a full-time counselor to be a good proposal, while only 18, or 10.7 percent, did not agree. Seventy-five percent of respondents were in favor of increasing minority enrollment while 24.9 percent did not. Only 34.3 percent of the enrolled students listed themselves as minorities.

Accepted in Program After First Application

Over one-half of the students (51%) indicated that they had been accepted into the program after the first application.

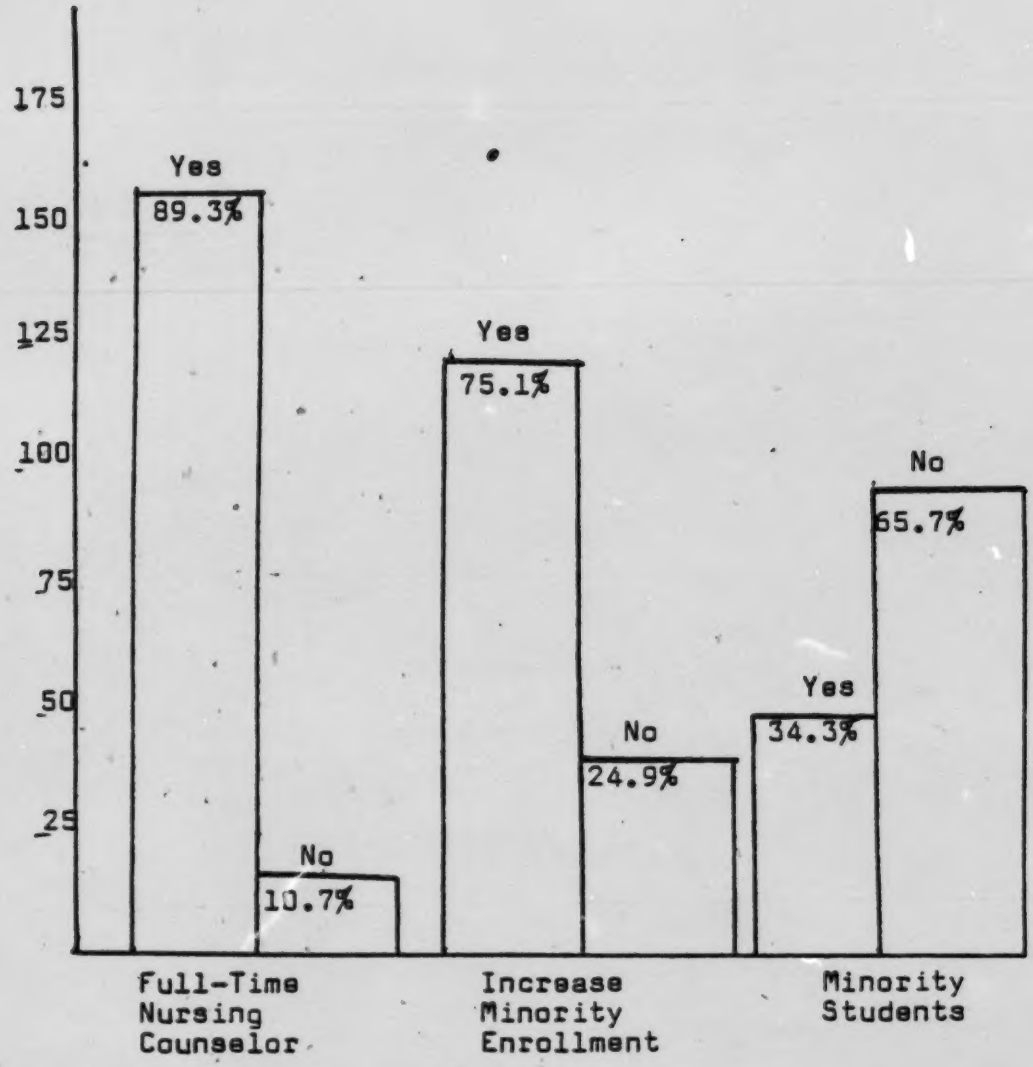

Figure 6: Distribution of Responses Regarding Full-time Nursing Counselor, Increasing Enrollment of Minority Students, and the Number of Minorities Enrolled in Program

The Number of Students Admitted with Associate of Arts, Baccalaureate and Master's Degree

Table 18 shows that 44.4 percent of the students had earned a degree. Because of the emphasis on academic criteria in the determination of selectivity, the table below confirms the increasing number of students admitted with degrees, as was demonstrated in a previous survey by the writer.[77]

Only two of the respondents held Master's degrees.

TABLE 18

FREQUENCIES AND ADJUSTED PERCENTAGES OF STUDENTS WITH DEGREES

Response	Associate of Arts Degree		Baccalaureate Degree		Master's Degree	
	F	%	F	%	F	%
Yes	40	23.7	33	19.5	2	1.2
No	129	76.3	136	80.5	167	98.8

Validation of Residency

Only 68, or 40.2 percent, felt that living in the community college district was essential for admission to

[77]Fannie E. Brown, "A Study of Typical and Atypical Nursing Students Relating to the Admission Standards at City College of San Francisco," a Practicum presented to Nova University in partial fulfillment for the Degree of Doctor of Education, 1976, pp. 7-8.

the program, even though they were aware of the oversubscription of applicants. One hundred one, or 60 percent, considered it insignificant.

The above question was open-ended and generated the following suggestions on validation by the respondents as listed in the returned questionnaires:

> Show evidence of a California driver's license; voter registration address; employment record; require a specific nursing school address form to be notarized; trust applicant; utility bills; show several pieces of mail postmarked and received at the given address; accept the college policy of residency validation; rent receipts; IRS tax return statements. Name listed in telephone directory; prior transcripts or enrollment at City College of San Francisco; bank checks; and library cards.

Additional remarks from students supportive of validation of residency were as follows:

One student pointed out that:

> City College <u>should</u> benefit students who live in San Francisco, After all, the school is funded by taxpayers, why shouldn't it benefit people who live and have lived in the community for many years?

Another added:

> Validation is important because currently there is a student in the program who was not even an American citizen, let alone a resident of San Francisco.

A third specified that he/she "personally knew of three students who were presently enrolled in the program and who were not residents of San Francisco."

Suggestions for Improving the Selection Process of the Nursing Department

Of the 169, 37 listed recommendations for improving the admissions criteria. Table 19 was developed to illustrate the number of times that some of the suggestions were mentioned.

TABLE 19

SUGGESTIONS AND THE NUMBER OF TIMES SPECIFIC RECOMMENDATIONS WERE MENTIONED

Suggestions	Number of Times
a. Place emphasis and weight on applicants who have health-related job experience.	3
b. Completion of all prerequisites and general education courses with a minimum G.P.A. of 3.5 should be required	5
c. G.P.A. of all completed prerequisite courses should be the number one criterion.	4
d. High priority for qualified students who reapply persistently for 2 years.	3
e. Consider giving priority to students without baccalaureate degrees.	2
f. Emphasize oral and written communication skills.	3
g. Offer a required prerequisite introductory course to nursing.	3
h. Require some type of psychological test for all qualified applicants.	2

Following are some of the recommendations mentioned by the respondents:

Utilize the service of a full-time counselor to be available to answer and expand on questions for pre-nursing students regarding the preparation and responsibilities of nurses. This could also serve as a screening tool.

Include nursing students on the admission and interview committees.

Consider a percentage of minority students for admission according to the college campus distribution, including male applicants.

Select by random selection. Establish a baseline for cut-off points on test scores and GPA to determine who is "qualified," with points given for grades and minority status.

Offer the L.V.N. (Licensed Vocational Nurse) an alternative for his/her clinical experience.

Be consistent about requirements. Give all applicants the same information; for example, some of us were told that all pre-requisites must be completed with a B or B+ average before acceptance, and after admission it was found not to be the criteria for others.

In personal interview or by essay, determine the sincerity of applicants' plans for active nursing post graduation. For example, what the student feels that he/she can or will contribute to nursing should weigh as heavily as what admissions deem noteworthy. This could serve as a screening device.

Expand the program or utilize clinical agencies in the afternoon hours and summer sessions for an extra class each year.

Qualify students by G.P.A. and performance in the interview only.

Improve counseling services for minorities in order to better prepare them for the nursing program, e.g. referring applicants for tutorial and financial aid when necessary.

More qualified L.V.N.s and/or health aides should be recruited. This should be a part of the nursing counselor's responsibilities.

Make pre-requisites available through literature fliers in addition to catalog.

Establishment of a GPA cut-off is the most equitable way to screen and accept applicants.

It gives the students control over their own lives. The lower achievers can repeat courses to raise their GPA and in that way they will eventually get in.

Reserve specific slots for L.V.N. applicants and the socio-exonomically disadvantaged.

Summary

This study was designed to improve the applicant selection process of the Nursing Department at City College of San Francisco and to make it applicable to any other program with the same problem.

The data in the questionnaires of the 51 chairpersons of associate degree nursing programs in California and the nursing student body (169) from City College of San Francisco represented the two sources that were used for the analysis. Through cross-validation of the hypotheses generated from the data, the hypotheses that were significantly or not significantly different were identified. The data were obtained from the nursing students in order to determine their insight about the problem, as well as to encourage suggestions that would facilitate modification of the criteria. The next chapter is a report of the findings.

Chapter IV

FINDINGS

Experience with this study demonstrated that hypotheses were useful as a guide to organized thinking and exploitation of data, especially when comparisons are attempted. It was useful in highlighting limitations in the findings, although not negating the value of the study. However, in order to clarify the relationships of the conclusions to the hypotheses and put them into perspective, certain findings can be expressed.

The purposes of this study were: to compare associate degree nursing programs' admissions criteria in California community colleges; to determine relationships, if any, between these criteria statements and oversubscription of applicants and under-representation of minorities existing in these community college nursing programs; and to identify possible solutions or approaches to solutions of the above-stated oversubscription and under-representation problems.

Improving the applicant selection process for the nursing program and developing a set of recommendations that could be applied to other associate degree nursing programs with a similar problem were the overall objectives of the study.

Questionnaires were mailed to 59 chairpersons of associate degree programs in California community colleges. Fifty-one (86%) responded.

In order to broaden the responses and possible solutions to the problems, the current nursing student body (196) at City College of San Francisco was requested to participate. One hundred-sixty-one (86%) responded.

In Phase I, the oversubscription of applications in associate degree nursing programs with an open-door philosophy was compared with associate degree programs with a selective policy.

The oversubscription of applications in associate degree nursing programs with an open-door philosophy in urban areas was compared to associate degree programs in non-urban areas. The admission of minority students to associate degree nursing programs with an open-door philosophy was compared with nursing programs with selective policies.

The admission of minority students to associate degree nursing programs in urban areas was compared with nursing programs in non-urban areas.

A t-test was performed in order to test each hypothesis. The differences were so small that they were not significant. Therefore, all four hypotheses were accepted.

One of the limitations in analyzing the data was due to the unavailability of information about the number

of respondents in Phase I who did not answer the question on minority enrollment in the community colleges and the associate degree nursing programs.

Another limitation was the result of a lack of ascertaining how many male students were enrolled in associate degree programs in California.

This inquiry also excluded nursing programs or nursing schools in the senior colleges and universities.

Hypothesis 1. There will be no significant difference in the mean proportion ($p < .05$) of oversubscriptions in schools with an open-door policy and those with selective admissions criteria. To test this hypothesis, a t-test was performed comparing schools having an open-door policy with those having a selective policy on the proportion of oversubscriptions. The results are presented in Table 20, page 109.

As can be seen in Table 20, the difference in the mean proportion was so small that it was insignificant. Therefore, the null hypothesis was not rejected.

Hypothesis 2. There will be no difference in the mean proportion ($p < .05$) of minority admissions to nursing programs in urban areas from those in non-urban areas. A t-test was performed comparing the proportion of minority admissions to nursing programs in urban areas with those in non-urban areas. On the basis of the findings (see Table 20), the difference was so small that it was not significant.

The null hypothesis was accepted.

Hypothesis 3. There is no significant difference in the mean proportion of oversubscribed applicants to urban versus non-urban associate degree nursing programs when tested at ($p < .05$). A t-test was utilized to test the hypothesis by comparing the proportion of oversubscribed applicants in associate degree programs in urban areas with those in non-urban areas. On the basis of findings, Table 20 illustrates that the difference was too small to be significant; therefore, the hypothesis was not rejected.

Hypothesis 4. A comparison of selective versus non-selective admissions criteria in associate degree nursing programs will demonstrate that there will be no significant difference in the mean proportions of minorities admitted to the program with selective versus non-selective admissions criteria when tested at ($p < .05$).

The t-test was employed to test the hypothesis. Based on the data, the small difference between the mean proportion of minorities admitted to nursing programs with selective policies from programs with non-selective policies was negligible (see Table 20). For this reason, the null hypothesis was not rejected.

Other research questions were:

Are associate degree nursing programs supplying sufficient graduates for the profession?

Are associate degree nursing programs producing a surplus of graduates for the profession?

> Is the oversubscription of applicants to nursing programs a national, regional, or urban problem:

The above questions have been answered by the National League for Nursing's annual national survey of nursing schools and programs in the United States by Walter L. Johnson:

> It must be remembered that the present leveling off in growth of nursing programs comes at the end of a marked expansion that began in the late 1960's in RN education. The rates at which the number of programs and admission of students were increasing could not be sustained for an indefinite period. An end had to be reached at some point, and it appears that this point has now been reached for RN and PN programs.[76]

TABLE 20

COMPARISON BETWEEN DIFFERENT GROUPS OF RESPONDENTS ON PROPORTION OF OVER-SUBSCRIPTIONS AND PROPORTIONS OF MINORITY ADMISSIONS

Measure	Group	N	Mean	Standard Deviation	t-value	Significance
Proportion Oversubscription	Open door	23	3.62	2.42	0.24	Not significant
	Selective	22	3.47	1.56		
Proportion Minority Admissions	Urban	12	0.19	0.19	0.03	Not significant
	Non-Urban	15	0.19	0.11		
Proportion Oversubscription	Urban	17	3.31	1.42	-0.62	Not significant
	Non-Urban	28	3.70	2.32		
Proportion Minority Admissions	Non-Selective	10	0.17	.08	-0.52	Not significant
	Selective	16	0.21	.18		

[76] Johnson, op. cit., pp. 569-571.

Johnson (77:587-588) pointed out that the growth rate of 1976 is only 1.03 for registered nurses' programs. "We postulate that the main influence delaying a zero growth rate in nursing is the dynamic force and continual heavy demand for entry into nursing schools."[77]

The data support this demand:

> There are more applicants for admission than there are places for students, perhaps as much as two to one in associate and diploma programs. There are also regional variations in the level of demand. States also differ widely in the amount of pressure to which their schools are subjected to admit students.[78]

The findings in Phase I reflected such variables as: open-door philosophy and adherence to that policy; required prerequisites, GPA, high school GPA and rank, high school courses, high school equivalency certificate; required prerequisite college courses; acceptance of students with health-related job experience; completion of prerequisite requirements; letter of reference, interviews, other interviewers listed by respondents; oversubscription; procedure employed for admission of applicants; departments involved in admission policies; other allied health programs utilizing the same selection process as the nursing program; chairpersons satisfied with present admission policy; external pressure; and racial/ethnic categories.

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[77] Johnson, op. cit., p. 592.

[78] Ibid.

Open-door Philosophy and Adherence to That Policy and Required Prerequisites

Twenty-five, or 50 percent, of the respondents reported an open-door philosophy. Of that 25, only 19, or 38 percent, adhered to that practice. Thirty-three, or 66 percent, required cut-off scores in mathematics, and 40, or 78.4 percent, entailed an English test for pre-entrance examinations. The non-selective programs that did not require academic requirements utilized references from responsible sources and personal interviews.

High School GPA, High School Rank, Required High School Courses

Only eleven schools required a minimum GPA, with a range of a minimum score of 2.0 to 3.0. Only .5, or 8.8 percent, considered high school class rank important. Thirty, or 60 percent, required high school courses which included mathematics, algebra and chemistry (see Tables 1 and 6).

High School Equivalency Certificate

All of the respondents (49) except one accepted high school equivalency certificates. (The State Board of Nursing Examiners states that "education equivalent to a high school education may be established.")[79]

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[79] Board of Registered Nursing, Laws Relating to Nursing Education Licensure-Practice (1977), p. 31.

Required College Courses and GPA

Thirty-five, or 70 percent, of the nursing programs required prerequisite college courses (see Table 1). Forty-one, or 89.1 percent, had prerequisites other than English, psychology, physiology, anatomy, and microbiology (see Tables 1-7).

Health Workers with Related Job Experience

Forty-one (80.4%) of the programs admitted applicants with health-related job experiences.

Required Prerequisites for Applicants with Health-Related Job Experience

Thirty-two, or 62.7 percent, of the respondents required completion of science courses before admission to the programs (see Tables 1 and 8).

Letter of Reference and Interviews

Because of the subjective nature of references and interviews, 76.5 percent of the respondents did not employ them.

Other Interviewers

Three nursing programs that were pleased with their criteria utilized a combination of students, community representatives, members of the nursing advisory committee, and representatives from various ethnic nursing organizations to serve on their admissions committee and/or assist in interviewing.

More Applications Than Can Be Accepted

Of the 51 respondents, 50, or 98 percent, reported oversubscription. The oversubscriptions ranged from 8 to 600.

Procedures Employed for Admission

Fifty-one percent utilized the GPA for college courses; 54.9 percent used the GPA of required pre-nursing courses. Twenty-nine point four percent used random selection after the GPA cut-off.

Departments Involved in Admission Process

Of the 51 respondents, 26, or 51 percent, of the respondents reported that nursing applicants are admitted college-wide by the Registrar's office. Thirty-three percent of the nursing programs employed a combination of the admissions committee, nursing faculty, and counselors and health science teachers (see Fig. 2).

Other Allied Health Programs That Utilize the Same Selection Process as Nursing Program

Twenty-nine, or 56.9 percent, of Allied Health Programs utilized the same selection process as the nursing program at their respective colleges.

Chairpersons Satisfied with Present Policy

Of the 51, 34, or 67.4 percent, of the chairpersons

indicated that they were satisfied with their present policy. Only four stated that they would consider changes at the end of spring, one had just changed, and one indicated a need for change, but was unable to implement change because that nursing program was governed by criteria developed for three other nursing programs in the Los Angeles area.

External Pressure

Of the 51, 33, or 64.7 percent, of the respondents stated that they had experienced external pressure regarding their admission policy. Of the eight pressure groups (see Table 2), 29, or 56.9 percent, of the respondents received complaints from the Board of Governors, 35.3 percent from rejected students, and only 2, or 3.9 percent, came from H.E.W. (Health, Education and Welfare).

Racial/Ethnic Categories in Institutions and in Nursing Programs

See Figure 3, p. 85, for a report of the proportion of minorities in institutions. See Figure 4, p. 86, for the median percentage of students with ethnic/racial categories enrolled in institutions and nursing departments. One respondent stated students were not asked to list their racial/ethnic background. Another reported no admissions.

How Oversubscription of Applicants Was Handled

Objective measures, e.g. grade point average and rank examination, are the most commonly used methods (see Table 13). Only 6 respondents stated that they had a waiting list.

Methods Used for Handling Applications Who Were Not Given First Preference for Next Admission

Twenty-two, or 52.4%, employed reapplication while only 13, or 31 percent, required qualification and re-application.

The findings in Phase II of the nursing student body at City College of San Francisco related to the following variables: Personal interview, validation of information given in interview; interview for the purpose of giving information about the program; priority for applicants with: health-related job experience, bilingualism, and socio-economically disadvantaged; completion of all prerequisite courses. Random sampling; full-time nursing counselor; increasing minority students; identification of minority students in the program; the number of students accepted the first time after application; the number of students with associate, baccalaureate, and master's degrees, and validation of residency.

Personal Interview, Validation of Information; Interview for Purpose of Giving Information

Unlike the chairperson respondents, 144, or 85.5 percent of the respondents concurred that personal interview was a significant part of the selection process. However, the response on "validation of the information given in an interview" was incongruous. Only 48, or 40.2 percent considered it significant.

Of the 169, 139, or 77.5 percent, objected to giving interviews for the purpose of information about the program and stated that it was a waste of time (see Table 15, p. 92).

Health-Related Job Experience

Of the 169, 126, or 74.6 percent, favored giving priority to applicants with health-related experience. Three students commented that students with previous health experience really knew about the demands and responsibilities that are required in nursing. Another stated that students who have health experience already know that they want to pursue nursing and are not likely to drop out.

Bilingualism and the Socio-Economically Disadvantaged

Only 89 (52.7%) supported applicants who were bilingual, and only 77, or 45.6 percent, supported the socio-economically disadvantaged (see Table 15). Two students commented that "grades, not race or economic status, should be the sole criterion for admission."

This response does not reflect the findings of Carnegie[81] and De Frank,[82] in which the nursing programs with the open-door philosophy recruited and worked with the nursing students after admission to facilitate retention.

Completion of All Prerequisites

Of the 169, 110, or 65.5 percent, responded positively to this question. Many of the older nursing students who had families and/or were working and supporting themselves, liked the idea of having only the nursing major to concentrate on. This also was confirmed by one of the chairpersons during an interview in the beginning of the study. Taylor found that grades and tests could predict academic success in nursing schools with a fair degree of accuracy.[82]

Random Selection

One hundred thirty-two, or 81.1 percent, responded negatively to this question.

Nursing Counselor

One hundred fifty-one, or 89.3 percent, felt that a full-time counselor for nursing would benefit the students.

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[80]Carnegie, op. cit., p. 83.

[81]DeFrank, op. cit., p. 38.

[82]Taylor, op. cit., p. 54.

Increased Qualified Minority Admissions

One hundred twenty-seven, or 75.1 percent, responded positively to this question (see Table 14).

Minority Students in the Program

Of the 169, only 58, or 34.3 percent, of the students were identified as minorities.

Students Accepted in the Program After the First Application

Eighty-six, or 50.9 percent, of the applicants were accepted after the first application.

Degrees

Forty, or 23.7 percent, had associate of arts or science degrees; 33, or 19.5 percent, of the respondents had earned the baccalaureate of arts, and only 2, or 1.2 percent, had Master's degrees. A total of 44.4 percent of the students held degrees (see Table 14).

Validation of Residency

Only 68, or 40 percent, of the students indicated that there was a need for validation of residency (see Table 15).

Open-Ended Responses on:

Suggestions for Verification of Residency and Improvement of Selection Process

The results showed a variety of methods for validating residency. (See p. 101) But the most expedient

way for the admissions committee appeared to be to follow the college's procedure of validation on address in the city.

Summary of the Findings, Differences and Similarities Between the Responses of the Chairpersons and the Student Body on the Applicant Selection Process

The chairpersons of the associate degree nursing programs: in contrast to the nursing student body of City College of San Francisco. The former tended to apply very little weight to interviews and letters of reference in general; considered a point system for GPA; perceived the validation of residency to be very significant; related health experience, bilingualism and socio-economically deprived; offered random selection (ranking GPA and examinations, reapplication) as alternative methods to alleviate oversubscription, but apparently differed in admitting minorities to their programs.

The chairpersons also exhibited characteristics for their nursing programs that were similar to the opinion of the student body; like the students, they were aware of the highly competitive admission criteria and the problem of oversubscribed applicants; the majority tended to prefer objective methods for admission standards and favored some priority for applicants with health-related job experience.

The nursing student body: the findings of the nursing student body response differed from the nursing chairpersons' response in the methods employed for over-subscribed applicants, specifically for offering points for minorities, bilingualism and the socio-economically disadvantaged; the use of interviews in general, especially when held solely for the purpose of giving information about the program; and the validation of residency. They were supportive of increasing qualified minority enrollment, and utilizing GPA of required prerequisite courses for the admission criteria.

In general, the findings revealed that there were few marked differences between responses of the nursing chairpersons and the nursing students.

The conclusions, recommendations and significance will be presented in the next chapter.

Chapter V

CONCLUSIONS, RECOMMENDATIONS AND SIGNIFICANCE

Conclusions

The following observations were noted from the data obtained:

1. Two-thirds of the programs employed some type of selective criteria for admission. This was supported by De Frank's study, which showed that the reasons given for modification of programs with open-door policies were due to "overutilization of clinical facilities for practicum experience, and the oversubscription of applications for admissions to the program."[83]

The modifications employed were the alteration of testing procedures, e.g., the use of prenursing guidance tests (see Table 3, p. 63).

Franklin found that some supporters of the open-door policy felt that the community college had moral, ethical and humanitarian obligations to serve the broadest possible segment of the applicants, not only the academically superior, but the less able as well, to a

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[83]De Frank, op. cit., p. 34.

level of education that would prepare them for a full life.[84]

2. The reason why high school achievement was disregarded by some nursing programs was reflected in the population of the community colleges today. De Frank found that large numbers of "older" students, including those with late careers as well as those from other careers, or those already in nursing, were desirous of moving along the continuum of nursing practice.[85]

3. The required college prerequisites were considered as objective devices for selection and prediction.

The study of Taylor indicated that grades and tests of learning ability could predict, with a fair degree of accuracy, academic success in nursing programs or schools. "These predictors exhibit a wide range of relationships with the criterion across schools even from year to year within the same school indicates that they should be studied continuously in the local setting."[86]

4. The majority of nursing programs give some priority to the above applicants. The latter may receive credit by challenge examinations. Applicants with health-

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[84]Franklin, op. cit., p. 16.

[85]De Frank, op. cit., p. 34.

[86]Taylor, op. cit., p. 82.

related job experiences must be able to demonstrate academic ability before given a chance to advance standing in the program.

5. In regard to references and interviews, Franklin stated that the lack of any possibility of explaining the feelings of the interviewer from the final determination regarding exclusion or acceptance seemed quite clear.[87]

6. Involving the community in the admission process would facilitate a more equitable process.

7. Johnson and De Frank's studies supported the fact that the oversubscription to nursing programs is a national phenomenon.

8. Objective devices were the most commonly used procedures for admission.

9. The use of a combination of the nursing faculty counselors, and health science teachers and the Registrar's office in the admission process implied that other disciplines were involved in the selection process, which alleviated departmental pressure. Also, additional factors were possibly considered for applicants, such as health-related job experiences, bilingualism and/or the socio-

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[87]Franklin, op. cit., p. 28.

economically disadvantaged, etc.

10. A large number of Allied Health Programs at many colleges are just as impacted as the nursing programs.

11. It appeared that the selection criteria were working for the majority of programs, or the impact reaction and influence applying pressure on the nursing department has not been great enough to initiate change.

12. The selection criteria were apparently supported by the college administration in some institutions, despite the external pressure that was applied.

13. The variability in the lack of response to the questions by some chairpersons on the social/ethnic categories in institutions and in nursing departments coincides with several differences and conclusions observed by Johnson in the survey on the distribution of minority students among all students in nursing programs and schools in the United States.

There were variable ranges of associate degree nursing programs reporting enrollments of black students to only one program reporting not any enrollment of students who were American Indian or who came from Oriental culture groups.

As Johnson explained earlier, regional clustering of ethnic groups is a significant variable here.

According to the returned responses from this

study, the admission of all minority nursing students in California associate degree programs was vastly under-represented. (See Table 12, p. 88)

14. The methods used for handling applications for those who were not given first preferences for the next admission could encourage applicants to raise their GPA by taking all prerequisite courses and general educational courses; and to persistently reapply, up to a point, would demonstrate sincerity and goal orientation, and eventually acceptance; or students would become discouraged and not re-apply.

15. The student respondents felt that performance in an interview should have more priority.

16. Students with health-related job experience were usually self-motivated and goal-oriented. (See Table 15, p. 92)

17. The need for bilingual health professionals has been documented previously in the literature.

18. Requiring completion of prerequisite courses would decrease the number of oversubscribed applications.

19. As De Frank pointed out, under the random selection method, applicants were never assured of preference, greater opportunity or guaranteed admission and may wait year after year, even if they had accumulated up to

100 percent of all required general education and nursing courses.[88]

20. Applicants who were given counseling and guidance, and orientation to nursing were more likely to succeed in the nursing program than if this assistance had not been given.

21. Apparently the majority of the nursing student body recognized the low enrollment of minority students in the program.

Multiethnic groups are clustered right here in the city. To reiterate Johnson's findings, which are applicable to other minorities, "Blacks are unequivocally the largest minority group in the United States. We could call attention to the drop in proportions of blacks admitted, enrolled and graduated from associate degree programs."[89]

22. The low minority enrollment coincides with a study done by the writer two years ago in which there were only 57 minorities enrolled in the nursing program.[90]

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[88]DeFrank, op. cit., p. 39.

[89]Johnson, loc. cit.

[90]Fannie E. Brown, "A Study of Typical and Atypical Students and the Admission Criteria of the Nursing Program at City College of San Francisco," a practicum presented to Nova University in partial fulfillment of the requirements for the degree Doctor of Education.

Fifty-eight ethnic minority students enrolled in the nursing program does not represent the large multi-ethnic population that the college serves.

23. The fact that only a little over one-half of the applicants were accepted after the first application demonstrated the competitiveness of the programs, as well as the problem that oversubscription presented.

24. There appeared to be a continuous increase in admissions of applicants with degrees and, consequently, higher total grade points. This was confirmed in a study by the writer.[91]

25. Without the validation of residency, applicants would be able to apply to any nursing program at local taxpayers' expense.

However, the former would stand a better chance of admission.

26. The conclusion from Table 19 (p. 102) indicated that the selection process could be modified and therefore improved by considering applicants who have completed all prerequisites; health-related job experience; qualified ethnic minorities; utilization of a point system; reapplication up to two years for students not accepted the first time; improving counseling and guidance services.

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[91] Ibid.

In summarizing the major conclusions of the assessment of policies in the 59 other associate degree programs, the following observations seemed clear:

1. There was an oversubscription of applicants to nursing programs in the state (in urban and non-urban areas) as well as nationally.

2. The oversubscription of applications was not singular to any specific educational approach. (It was just as prevalent in programs with selective policies as it was in programs with the open-door philosophy.)

3. There were diversified methods employed in both testing and utilizing the results for acceptance into the nursing curriculum. The majority of programs utilized objective criteria for admission.

4. No one method of admission emerged as a way of avoiding pressures from sources within or external to the nursing department.

5. The majority of the nursing programs appeared to be aware of the complexity of the problem that addressed itself to how best to meet the demands of equal opportunity while at the same time handling the dilemma of oversubscription of applications to the program.

6. Ethnic minority students were consistently and enormously scarce in all the programs (and even absent in

one program) irrespective of geographical location. There was no incentive or plan offered by any of the programs to recruit qualified minorities for nursing.

Recommendations

Although the number of both participating groups in this study was relatively small, some short-term and long-term suggestions were made as a result of the disclosure; and the reflection of several chairpersons' statement: "No school can admit all applicants."

1. On the basis of the findings of this study, it was recommended to hire a full-time nursing counselor to counsel, advise, and guide pre-nursing students, as well as actively recruit for qualified ethnic minorities.

Preadmission and continuous counseling post-admission could provide the students with more realistic knowledge and expectations of nursing, educationally and professionally, and of the demands that nursing practice would mean for them.

2. The literature has documented that standardized tests, e.g. the National League for Nursing Pre-entrance Examination and the Psychological Corporation Pre-nursing Test have been considered predictors, with varying amounts of validity, of the success of the white, middle class young female in a nursing education program. The validity of these tests for older applicants (and these comprise

much of our community college population) is questionable.

The use of the above tests and others that are similar mitigate against persons in the lower socio-economic strata of society. Most minority applicants have experienced an education devoid of advantages available for the more affluent society. However, they can succeed, given the opportunity and proper remediation. It was therefore suggested to screen applicants by requiring completion of all prerequisite nursing and general education courses with at least a 2.5 grade point average.

3. Because the majority of chairperson respondents in Phase I regarded interviews as highly subjective (and confirmed by the literature), it was suggested to abolish interviews.

4. The data indicated that the majority of students did not wish to verify residency despite the fact that some of the respondents stated that there were students who were attending City College of San Francisco's nursing program who lived out of the district. The writer also had first-hand knowledge of this in the past. Because of the changes and time involved, it was therefore recommended to require validation of residency by verification of address.

5. Since much of the criticism of the admissions criteria came from rejected applicants and community representatives, it was suggested that the community and student

body representation be included on the admissions committee.

6. Based upon the findings of the student body response on validation of the socio-economically disadvantaged and the literature's support for the need of this source of representation, it was recommended that students verify their socio-economic status.

7. As mentioned previously, in light of the documented significance and need of persons who are bilingual in the health field, it was recommended that the applicants demonstrate that proficiency by an oral and written test.

8. Theoretical as well as clinical experiences comprise the nursing curricula. Therefore, much of the program must be developed beyond the doors of the college. Here again is a mutual problem in many geographic areas of the country. A situation of over-utilization of hospitals has developed where there are too many students from various levels of nursing education competing for very limited experiences in clinical facilities. This was especially true in specialty areas where admissions to hospitals have markedly decreased for many socio-economic reasons. Pediatrics, obstetrics and psychiatric nursing are good examples of these. Three senior colleges and universities, and one licensed

vocational nurse's program, compete for the same clinical facilities as City College of San Francisco's nursing program. Some of the schools utilize weekends and evenings until midnight.

In addition, this study has consistently shown that oversubscription and under-representation of ethnic minorities is a national phenomenon. Because of this complex problem, the principal statistical conclusions pointed to more positive aspects of selective schools and programs as compared to non-selective.

In view of these findings, and the fact that numerous complaints were voiced by community representatives, it was suggested that the college administration and/or the nursing faculty begin an intensive effort to educate the public to the reasons why all applicants cannot be accommodated, and why the program cannot be expanded at this time.

9. Because of the impacted nursing program at City College of San Francisco, it was recommended to employ a point system to facilitate further screening of applicants. Based upon the findings of this study, qualified applicants who were not accepted after applying should reapply consistently up to two years and then be automatically accepted on a first-come, first-served basis according to the date on the application.

10. Because of oversubscribed applications, it was recommended that applicants who have had health-related work experience, e.g., the L.V.N. (Licensed Vocational Nurse), psychiatric and laboratory technicians and medical corpsmen, etc., who wish to challenge examinations for advanced placement in the program, be required to complete all nursing prerequisites and general education courses with a GPA of 2.5 before admission, just as other pre-nursing applicants.

11. In view of the fact, which was supported by the literature, that there is such a small percentage of ethnic minority groups in schools and programs of nursing leading to R.N. licensure locally and throughout the United States, it was strongly recommended that an extensive and intensive recruitment program be developed to prepare, admit and assist minorities and/or disadvantaged students with potential and help them to develop skills necessary for success in a nursing career.

12. Since the college president had mandated that the nursing faculty develop alternate solutions for the admissions process that would not only modify or resolve this immediate twofold problem at City College of San Francisco, but also would be applicable to other programs in community colleges faced with a similar situation, it was recommended that the nursing faculty and/or admissions committee utilize the work of this study and react to the

suggestions made.

Long-term significance:

13. In order to facilitate City College of San Francisco to accomplish its commitment to the ethnic minority communities, as well as focus attention on this significant source of potential nurse power, and the expansion of educational opportunities to them, it was recommended that funds for projects, e.g. the Seatlantic and others that were referred to in the literature section be investigated and requested through the development of written proposals.

14. Assessment of the improvement of the selection process was recommended by continued annual re-evaluation and refinement of the criteria to determine its effectiveness; and until it is as equitable as possible and fully operational.

15. If this study should be extended or replicated, it was recommended that the investigator survey the male nursing students enrolled in associate degree programs, particularly the minority male.

16. It was also recommended that an additional study be made of admission devices that would measure such things as motivation and dimensions of success.

Strategies for Diffusion, Implementaion and Change

1. The findings of this study revealed that there was a definite need for a full-time nursing counselor. The writer had recommended this to the college adminstration as the result of another study on the administrative workload of chairpersons in associate degree programs in California. As of this writing, applications were being processed for the selection of a full-time counselor for Allied Health Division. Nursing is a component of that division.

It was further recommended that the counselor be actively involved in recruiting qualified minorities for the nursing program. This could include developing an annual calendar of activities, with pre-scheduled visits to high schools with counselors and/or teachers and students to educate them about the nursing program's requirements; it also could include presentations or participation in local workshops with or without local organizations and community churches; also, through meetings or seminars with directors of hospitals and convalescent homes and the employed nurses' aides and licensed vocational nurses in these institutions for recruitment purposes.

2. It was suggested that implementation of the required nursing prerequisites and general education courses be initiated within one year to allow time for

the new criteria to be published in the new college catalogue. Having the above requirements completed would permit the students to spend full-time with the nursing component and facilitate completion of the course with minimum problems. Requirement of a specified grade would be motivating and also serve as a screening factor. In addition, the date on the above applicants' applications should be considered in that order.

3. Instead of interviews, plan and initiate some type of required pre-nursing course or seminars each year, in which pre-nursing students of questionable ability and/or motivation must attend this specific program. Include the nursing counselor and nursing faculty in administering additional counseling and information regarding the nursing program. Officially, assist them to clarify their goals and accept their capabilities. In a step-by-step process, explain to the students the nature of a proficiency test that will be given at the end of the course or seminars to facilitate further screening of qualified applicants. For example, have the students demonstrate their competency in nursing mathematics and written communications in specifying goals.

This program could be exploratory for the student and evaluative for the nursing department. Not only would this method provide some self-selection, but it would give the department an opportunity to view the applicants

as individuals and create experiences which would demonstrate meaningful relations to the duties and responsibilities of the technical nurse.

4. Require applicants to verify residency by utilizing the same procedure (as published in the catalog) demanded by the Registrar's office. Validation of residency by some proof of address. This method was suggested in order to expedite time for the admissions committee.

5. Actively involving the community representatives and the nursing student body could be achieved by including two students (and two alternates), who would be representative of the group, as well as a member of each of the local ethnic nurses' organizations, and two members from the community advisory committee on the admissions committee.

6. Validate applicants' socio-economic status by requiring them to follow the college's Financial Aid Office procedure. There should be a follow-up to ascertain if the procedure was followed and notation of the results or duplicate copies of the form should be attached to the applicant's application. The above method was deemed the most expedient and time-saving way for the admissions committee.

7. Bilingualism could be validated through an oral and written test prepared by the language department

(as it was done last year). It was suggested to limit the dialect to the most commonly spoken languages in San Francisco, e.g., Spanish, Asian, French and Italian.

8. Informing the public about the stated twofold problem and the realistic inability to expand the program to accept all applicants could be done by placing it on the agenda of the local board of governors' meeting; through the use of the press and news media; through announcements at local organizations and community churches.

9. Utilize a point system by weighing completion of all required academic courses, health-related job experiences, bilingualism, qualified ethnic minorities and/or the socio-economically disadvantaged, and persistent re-application up to two years and admit on a first-come, first-served basis.

10. List the requirements for applicants with health-related work experience in the college catalog.

In addition, require a demonstration and passing of certain basic clinical skills in the nursing skills laboratory, or at the clinical facility. Validate the above applicants' current registration and employment up to five years.

11. Establish an active recruitment committee to work with the nursing (or Allied Health) counselor. Enlist that committee to prepare a developmental studies

program with the assistance of the dean or associate dean of instruction. Offer this program during the summers for minority prenursing applicants, including the male applicants. Determine the individual needs of the students and refer accordingly. Not all minority applicants have the same deficiencies because of a disadvantaged background. Therefore, the program should be flexible enough to assess each student's specific needs. Give continued assistance when necessary until deficiencies are corrected and admissions criteria are fulfilled.

Continue this academic assistance if warranted after admission and throughout the two years. Refer applicants who have exhibited difficulty in communicating in the English language for remediation and additional English courses, until they have command and comprehension of the language.

Provide release time (substitutes) so that involved faculty members could meaningfully participate in the above proposal.

12. A copy of this study was also presented to the college president, the associate dean of instruction (who is also the assistant dean of Allied Health Division) and the Board of Governors. It was suggested that each of the above named members review the recommendations and respond to them and to the nursing faculty.

Significance

The overall objective of this study was to improve the selection process of the nursing department and to increase the enrollment of qualified minority applicants. Although the admissions criteria were selective at City College of San Francisco, the writer wishes to make it explicit that she subscribed to the concept of excellence; applicants should be chosen on the basis of their qualifications and other criteria for selection, exclusive of the consideration of skin color or sex. She was equally explicit in advocating the affirmative action concept. The two ideas were not in conflict. Based upon the findings, it appeared that a significant number of programs subscribed to the first and rejected the second.

The above suggestions were not meant to imply that they were a panacea to the two-fold problem. They were developed with the hope that concrete guidelines in modification of the present policy would be made in as equitable a way as possible.

Furthermore, in order to implement change and cope with the problem of oversubscription of applicants and under-representation of minorities, it would be necessary for the nursing faculty and admissions committee, the college president, the associate dean of instructions, and the Board of Governors to review the recommendations and react to them and to the modifications made. Once the criteria have been revised and approved, the nursing

faculty and admissions committee need the open support of the administration. This should be conveyed publicly at the Board of Governors' meetings and to the press.

The implications and key to modifying the above problems of the nursing program at City College of San Francisco (and any other nursing programs in the community colleges faced with similar problems) appeared to be: no program can accept <u>all</u> applicants; educate the public why <u>all</u> applicants cannot be accommodated; and educate and allow the public to participate in the admissions process as recommended.

REFERENCES

REFERENCES

American Nurses' Association. Facts About Nursing. New New York: American Nurses' Association, 1966.

_____. Facts About Nursing. New York: American Nurses' Association. 1967.

_____. Facts About Nursing. New York: American Nurses' Association, 1973.

Anderson, Bernice. Nursing Education in the Community College. New York: J. B. Lippincott Co., 1966.

Baca, Josephine. "Some Health Beliefs of the Spanish-Speaking," Family-Centered Community Nursing. Edited by A. M. Reinhardt and M. D. Quinn. St. Louis, Mo.: C. V. Mosby Co., 1973.

Blai, Boris J. "Pressures and Practices in College Admissions," College and University (Winter, 1968), 44:167-177.

Blewett, William E. "Minority Students' Special Needs and Recruitment." Presentation for a Training Institute of the Association of Schools of Allied Health Professions, University of Pennsylvania, 1973.

Bloch, Bobbie. "A Look at Nursing Intervention and Black Patient Care." A paper presented at a conference on the Care of the Black Patient, held at the University of California, San Francisco, Ca. May 3-4, 1974.

Bolton, Dale L. Selection and Evaluation of Teachers. Berkeley, Ca.: McCutchen Publishing Corporation, 1973.

Branch, Marie. "Minority Nursing Students Come--and Stay," WICHE Reports on Higher Education, July, 1973.

Brown, Esther L. Nursing for the Future. New York: Russell Sage Foundation, 1948.

_____. Nursing Reconsidered: A Study of Change, Part 1, The Professional Role in Institutional Nursing. Philadelphia: J. B. Lippincott Co., 1970.

Brown, Fannie E. "A Study of Typical and Atypical Students Relating to the Admission Standards at City College of San Francisco," A Practicum Presented to Nova University In Partial Fulfillment for the Degree of Doctor of Education, 1976.

Calif. State Department of Consumer Affairs, The. 1976 Accredited Associate Degree Programs of Professional Nursing. Sacramento, Ca., 1976.

Campbell, Teresa and Chang, Betty. "Health Care of the Chinese in America," Nursing Outlook, 21:249, April, 1973.

Carnegie, Elizabeth M. Disadvantaged Students in R.N. Programs. New York: National League for Nursing 1972.

Cortes, Carlos. "Teaching the Chicano Experience," Teaching Ethnic Studies: Concepts and Strategies. Edited by James A. Banks. (43rd Yearbook) Washington, D.C. National Council for the Social Sciences, 1973.

Counts, George. Dare the School Build a New Social Order? New York: John Day Co., 1932.

Dairty, W. "Crucial Health and Social Problems in the Black Community," Journal of Black Health Perspectives, Vol. 1, No. 3, June-July, 1974, p. 26.

Davis, Fred and Olesen, Virginia. "Baccalaureate Students' Images of Nursing: A Study of Change Consensus and Consonance in the First Year," Nursing Research, XIII, Winter, 1964, 8-15.

DeFrank, Sister Joseph Leo. "A Survey and Assessment of Admission Policies to Resolve the Problem of Oversubscription of Applicants." A Practicum Presented to Nova University in Partial Fulfillment of the Requirements for the Doctor of Education Degree (March, 1975).

DeChow, Georgeen A. "The Associate Degree Programs," R.N., May, 1971, 34:40-34.

Dristan, Laura C. "Characteristics of Students in Three Types of Nursing Education Programs," Nursing Research, XIII (Spring, 1964), 159-166.

Ellison, Ralph. The Invisible Man. San Francisco: Jossey-Bass, Inc. San Francisco, 1952.

Emil, O. Towes, and Hiatt, Wilma. "Nursing Education: A Community Service," California Education (7):20, 1964, quoted in Rose Marie Parse, "The Advantages of the Associate Degree Program," Journal of Nursing Education, 6:15+, August, 1967.

Fox, D. J. Fundamentals of Research in Nursing. Second edition. New York: Appleton-Century-Crofts, 1970.

Franklin, Doris. Selective and Nonselective Admissions Criteria in Junior College Nursing Programs. New York: National League of Nursing, 1975.

Grippando, Gloria, "A.C.T.: Its Relationship to Practical Nursing Education," a Practicum presented to Nova University, Fort Lauderdale, Fla., in partial fulfillment of requirements for the Doctor of Education degree, December, 1973.

Hagemeyer, Richard. "Community-based Instruction," The College Board Review, No. 99, Spring, 1976.

Healy, Timothy. "New Problems--New Hopes," Change Magazine, 24+, Summer, 1973.

Kaiser, Jean E. A Comparison of Students in Practical Nursing Programs and in Associate Degree Nursing Programs. New York: National League for Nursing, 1975.

Koon, Bruce. "Asian American Victims of Census," San Francisco Examiner, March 26, 1975.

Lande, Sylvia. A National Survey of Associate Degree Nursing Programs. New York: National League for Nursing, 1967.

Langlois, Harold V., Macmillan, Robert. Education of Prematriculated Program for Disadvantaged Students at the University of Rhode Island. Kingston, R.I. University of Rhode Island Press, 1969.

Lipsaught, Jerome P. An Abstract for Action. New York: McGraw-Hill Book Co., 1970.

Matheney, Ruth. "Can Nursing Live With Open Admissions?" American Journal of Nursing, December, 1970, 70:2561+.

Medsker, Leland L, and Trent, James W. The Influence of Different Types of Public Higher Institutions on College Attendance from Varying Socioeconomic and Ability Levels. Berkeley, Ca.: Center for the Study of Higher Education, University of California, 1965.

"National Health Insurance: Health Care as a Basic Right, ANA President Testifies," The American Nurse, March, 1974, 6:1.

Medsker, Leland L & Dale, L. Tillery. Breaking the Access Barriers: A Profile of Two Year Colleges. New York: McGraw-Hill Book Co., 1971.

Miller, Michael. "On Blacks Entering Nursing," Nursing Forum, Vol. XL, No. 3, 1972.

Montag, Mildred L. Education of the Nursing Technician. New York: John Wiley and Sons, 1951.

_____"Technical Education in Nursing," American Journal of Nursing, May, 1963, 63:100-103.

_____. Community College Education for Nursing. New York: McGraw Hill Book Co., 1959.

National Commission for the Study of Nursing and Nursing Education. An Abstract for Action. New York: McGraw-Hill Book Co., 1970.

National League of Nursing. Report on Associate Degree Programs in Nursing. New York: The League, 1961.

_____. "Educational Preparation for Nursing--1976." Nursing Outlook, September, 1977.

_____. Criteria for the Evaluation of Educational Programs in Nursing Leading to an Associate Degree. New York: National League for Nursing, Inc., 1973.

Native American Health Center. California American Indian Directory. San Francisco: The Center, 1973.

Nicholson, Everard. Success and Admission Criteria for Potentially Successful Risks. Providence, R.I.: Brown University, 1970.

North Carolina State Board of Education. Advance Placement Policies of Nursing Education in North Carolina. Chapel Hill, N.C.: University of North Carolina, 1975.

Notter, L. E. Essentials of Nursing Research. New York: Springer Publishing Co., 1974.

Orque, Modesta A. "Health Care and Minority Clients," Nursing Outlook, May, 1976. pp. 313-316.

Quinn, Edward. "We're Holding Our Own," Change Magazine, Summer, 1973, 30+.

Rand, A Million Random Digits with 100,000 Normal Deviates. New York: The Free Press, 1955.

Research Medical Center. Persistors and Withdrawals: An Analysis of the Differences. Kansas City, Mo. School of Nursing, 1975.

Rines, Alice R. "Associate Degree Education: History, Development and Rationale," Nursing Outlook, August, 1977, p. 496.

Rutledge, Aaron, L, Gass, Gertrude Yeman. Nineteen Negro Men: Personality and Manpower Retraining. San Francisco: Jossey-Boss, 1967.

San Francisco, Community College District. Campus Report, Vol. 8, No. 1, October 17, 1977.

_____. Intercom. October 7, 1977.

Schneider, Harriet. "Standardized Tests in Nursing," National League for Nursing." Presented at the Open Curriculum Conference III. Nov. 7-8, 1974.

Secretary's Committee to Study Extended Roles for Nursing. "Extending the Scope of Nursing Practice," as quoted in Nursing Outlook, January, 1972, 20:46-52.

Skaggs, Kenneth G. "The Community College Student" (Paper presented at Workshop for Faculty in Nursing and Other Health Occupation Programs). New York: National League for Nursing, Inc., 1973.

Stepsus, Patricia Ann. "Development of an Admission Policy for the Registered Nurse in a Baccalaureate Program of Nursing." The Educational Policy System, a Practicum presented to Nova University in partial fulfillment for the requirements for the Doctor of Education degree, December 8, 1976.

Taylor, Calvin, et al. Status of Prediction Studies in Utah. Salt Lake City: University of Utah Press, 1962,

Taylor, Alton. Analysis of Bachelor Degree Recipients in the School of Nursing, University of Virginia, A Second Report. Charlottesville: Office of Institutional Analysis, University of Virginia, 1970.

Thelander, Margaret. "A Study of Selection and Admission Criteria in Relation to the Attrition Rates of Fresmen in Educational Programs of Nursing Leading to the Associate Degree." Unpublished Master's thesis, University of Alabama, 1961.

Tipton, Dale. "Blood-Related Diseases: An Overview," Journal of Black Health Perspective, 1:35-40, January-February, 1974.

University of the State of New York. The State Department. The New York Associate Degree Nursing Project. Albany: The University of the State of New York.

Vroman, Clyde. "Problems and Issues Confronting the Admissions Community," College Admission Policies for the 1970's, papers delivered at the Colloquium on College Admission Policies, Michigan, June 18-23, 1967. New York: College Entrance Examination Board, 1968.

Wagner, Maraha and Haug. Chicanos: Social and Psychological Perspectives. St. Louis: C. V. Mosley Co., 1971.

APPENDICES

APPENDIX A

CITY COLLEGE OF SAN FRANCISCO

DEPARTMENT OF NURSING

Academic Background Scale

There is a high positive correlation between scores in science courses and Nursing State Board scores (See Category I).

Applicants must have completed the following courses in order to be considered for admission: At least two courses from Group A and one course from Group B, with a minimum of a 2.5 grade point in all courses taken in Group A, and a minimum of a 2.5 grade point average in all courses taken in Group B. A final grade of C or better is required in all courses.

Group A Course	Units	Group B Course	Units
Anatomy 25*	4	English 1A	3
Microbiology 12	3	Political Science 1	3
Physiology 12	3	OR	
Psychology 1	3	History 1, 10, 17A OR 17B	3
		Sociology 1	3
		Speech 1A or 4	3

SCALING WILL BE BASED AS FOLLOWS:

Category I

$$\frac{2 \times \text{GPA from Group A}}{\text{PLUS}} + \frac{1 \times \text{GPA from Group B}}{}$$

maximum score: $\frac{8}{4}$, $\frac{}{12}$

---

*Anatomy 25 is a 4-unit course; Microbiology and Physiology are both 3-unit courses. (See Category II)

Category II (from Group A courses: Required:	minimum of TWO courses
a) Microbiology OR Physiology + Psych 1	0.0 points
b) Anatomy + Psychology 1	1.0
c) Microbiology AND Physiology	2.0
d) Anatomy + Microbiology OR Physiology	2.5
e) Anatomy + Microbiology OR Physiology + Psychology	3.0
f) All three sciences	3.5
g) All four courses in Group A	4.0 (Maximum score)

Category III (from Group B courses) Required	minimum of ONE course
a) 1 course	0.0 points
b) 2 courses	1.0
c) 3 courses	2.0
d) all courses	3.0 (Maximum score)

HIGHEST POSSIBLE SCORE:

Category I	12.0 points
Category II	4.0
Category III	3.0
	19.0

APPENDIX B

CHAIRPERSONS' COVER LETTER

Dear Chairperson: •

I am collecting information with the interest of the Nursing Department of City College of San Francisco. It has a problem of oversubscription of qualified applicants, and we are attempting to improve the selection process.

All fifty-nine chairpersons of associate degree nursing programs in California will be asked to participate. Your input will be most valuable for this study. A questionnaire has been designed for this purpose.

Your prompt cooperation in completing it will be greatly appreciated. Please return it in the enclosed self-addressed, stamped envelope as soon as possible.

Thank you for your assistance with this survey.

Very truly yours,

APPENDIX C

CHAIRPERSONS' QUESTIONNAIRE

This questionnaire has been designed to assess the selection process of associate degree nursing programs of California community colleges.

1. a. Does your department have an "open door" philosophy?

	(1) Yes	(2) No
	☐	☐

b. If yes, does the nursing department adhere to this policy?

	(1) Yes	(2) No
	☐	☐

2. A. What tests are required by the college?

	(1) Yes	(2) No
a. English	☐	☐
b. Math	☐	☐
c. Personality test	☐	☐
d. Other _____ _____	☐	☐

What tests are required by the nursing program in addition to the tests required by the college?

_____

_____

33. a. 1. Do you require a minimum grade point average for admission?

(1) Yes	(2) No
☐	☐

2. If yes, specify the minimum grade point average. _____

b. 1. Do you require high school class rank for admission?

(1) Yes	(2) No
☐	☐

If yes, specify class rank required.

2. Minimum high school rank _____

3. Minimum high school G.P.A. _____

4. Is successful completion of certain high school courses required for admission to your program?

(1) Yes	(2) No
☐	☐

If yes, what are the required courses (check all that apply)

a. Biology	(1) ____
b. Chemistry	(2) ____
c. Basic Mathematics	(3) ____
d. Algebra	(4) ____
e. Physics	(5) ____
f. Other (please specify)	(6) ____

_____

_____

5. Do you admit students with a high school equivalency certificate?

(1) Yes	(2) No
☐	☐

6. a. Do you require prerequisite college level courses of beginning nursing students?

(1) Yes	(2) No
☐	☐

b. If yes, what are they? Please check below. Specify the number of units.

a. Chemistry_____ f. Psychology_____

b. Microbiology_____ g. Sociology_____

c. Anatomy_____ h. Speech_____

d. Physiology_____ i. Other_____

e. English_____

7. a. Do you allow licensed vocational nurses, medical technicians, and/or corpsmen credit and advanced placement by examination?

(1) Yes	(2) No
☐	☐

b. If yes, do you require the completion of science courses prior to taking the challenge examination?

(1) Yes	(2) No
☐	☐

c. Specify science course required:

1. Physiology

(1) Yes	(2) No
☐	☐

(continued)

7. (continued)

	(1) Yes	(2) No
2. Anatomy	☐	☐
3. Microbiology	☐	☐

8. A. Do you require a written personal letter of reference for admission?

	(1) Yes	(2) No
	☐	☐

B. If yes, state preference of source for above references.

	(1) Yes	(2) No
a. minister	☐	☐
b. former teacher	☐	☐
c. employer	☐	☐

d. other _____

_____

9. A. Do you interview applicants for the program?

	(1) Yes	(2) No
	☐	☐

a. If yes, do you do:

Group interviews?

	(1) Yes	(2) No
	☐	☐

1. If yes, what is the size of the group?

_____

2. Average length of time?_____

B. 1. Individual interviews?

	(1) Yes	(2) No
	☐	☐

2. If yes, what is the average length of time of every interview?

_____

C. How many interviewers are there?_____

10. Who does the interview?

	(1) Yes	(2) No
a. college counselors	☐	☐
b. nursing faculty	☐	☐
c. other _____	☐	☐
_____		

(continued)

10. (continued)

What major interview techniques are used? Specify.

_____

_____

_____

11. a. Do you receive more applications annually than you can accept?

(1) Yes	(2) No
☐	☐

b. If yes, how many more?_____

12. What method do you use for handling the oversubscription of applications? Check appropriate box(es):

a. random selection

(1) Yes	(2) No
☐	☐

b. highest scores on required entrance test

(1) Yes	(2) No
☐	☐

c. performance in interview

(1) Yes	(2) No
☐	☐

d. high school performance (this includes G.P.A. and recommendations)

(1) Yes	(2) No
☐	☐

e. Grade point average of college courses

(1) Yes	(2) No
☐	☐

12. (continued)

f. grade point average of college based courses required for nurisng

(1) Yes	(2) No
☐	☐

g. "First come, first served" acceptance after testing until quota is reached

(1) Yes	(2) No
☐	☐

h. select a certain quota of applicants from pre-determined groups, i.e., high school students, applicants with health-related work experience (licensed vocational nurses, technicians, aides, orderlies, ward clerks, etc.), age and/or sex, minorities, bilingual or socio-economically disadvantaged students

(1) Yes	(2) No
☐	☐

i. other (please specify):

_____

_____

j. If yes, briefly describe your pre-determined method:

_____

_____

_____

13. Is your admission process implemented totally by the Department of Nursing, Counseling and Registrar's Dept.?

	(1) Yes	(2) No
a. Dept. of Nursing	☐	☐
b. Counseling Dept.	☐	☐
c. Registrar's Office	☐	☐
d. Admission Committee	☐	☐

14. Do other allied health programs use the same applicant selection process as you do?

(1) Yes	(2) No
☐	☐

15. At this time are you satisfied with your admission policy?

(1) Yes	(2) No
☐	☐

If no, how would you like to see it modified?

_____

_____

_____

16. a. Have you experienced any pressure on your selection process from groups in the community?

(1) Yes	(2) No
☐	☐

If yes, check the appropriate areas(s):

b. Rejected applicants_____

c. Board of Governors_____

d. Community representatives_____

e. Legislators_____

f. College administration_____

g. News media_____

h. Local Health, Education & Welfare Office_____

i. Affirmative Action officer_____

j. Other_____

17. What percentage of students fall within the following racial/ethnic categories?

	Institution	Nursing Dept.
Hispanic surname	a. _____%	b. _____%
Caucasian	c. _____%	d. _____%
Oriental	e. _____%	f. _____%
Black	g. _____%	h. _____%
American Indian	i. _____%	j. _____%

18. a. How many students do you admit per year? _____

b. If unable to take all applicants, are they put on a waiting list?

(1) Yes ☐ (2) No ☐

If yes, in what order?

_____

_____

c. Are these applicants given first preference for the next admission period?

(1) Yes ☐ (2) No ☐

If not, how are they handled?

_____

_____

_____

19. Signify if you would like a summary of the results of this survey.

(1) Yes ☐ (2) No ☐

NAME _____

Address _____

_____

APPENDIX D

Interview Questions for Chairpersons of the Nursing Program (at Merritt College, Chabot, Contra Costa, and Los Medanos Colleges)

1. Is your nursing program an impacted program?
2. Have you ever had a problem with the applicant selection process in your department?
3. Do you have a full-time nursing counselor to counsel pre-nursing students?
4. Does his/her role facilitate the admissions process for your department?
5. Are you pleased with your applicant selection process now?

   If not, what changes would you make?
6. Do you favor the random sampling selection method of admission?

APPENDIX E

STUDENTS' COVER LETTER

Dear Student:

I am collecting information with the interest of the Nursing Department at City College of San Francisco. The department has two immediate problems: (1) an oversubscription of qualified applicants, and (2) an under-representation of minority students in the program.

A questionnaire has been designed to obtain your valuable input and suggestions for improving the above problems, since you are in a unique position to reveal information from your experience.

Your cooperation in filling out the short survey form will be greatly appreciated.

FANNIE E. BROWN, R. N.
Instructor

APPENDIX F

STUDENT QUESTIONNAIRE

PLEASE CHECK THE APPROPRIATE BOXES IN ANSWER TO THE QUESTIONS.

1. a. Do you think that personal interviews are necessary?

1 Yes	2 No
☐	☐

b. If yes, would you like interviewers to have you validate pertinent information given in the application only?

1 Yes	2 No
☐	☐

c. If no, should personal interview be given for information about the program only?

1 Yes	2 No
☐	☐

2. Are you in favor of a point-system whereby priority would be given to:

(a) Students who have bad health-related job experiences?

1 Yes	2 No
☐	☐

(b) Students who have been tested to be bilingual?

1 Yes	2 No
☐	☐

(c) Students who have been socio-economically disadvantaged?

1 Yes	2 No
☐	☐

CONTINUED ON THE FOLLOWING PAGE

If yes to a, b, and c, how would you validate each one? Please list them below:

(a)_____

(b)_____

(c)_____

3. Do you think that all pre-requisite courses (including all sciences and general education courses) should be completed before a student is admitted to the nursing program? 1 Yes ☐ 2 No ☐

4. Are you in favor of random sampling selection as part of the admission criteria? 1 Yes ☐ 2 No ☐

5. Do you think that a full-time nursing faculty member should be hired as a counselor for pre-nursing and nursing students? 1 Yes ☐ 2 No ☐

6. Are you in favor of increasing qualified minority admissions to better represent the ethnic population in the community? 1 Yes ☐ 2 No ☐

7. Are you a minority student? 1 Yes ☐ 2 No ☐

8. Were you accepted in the nursing program the first time that you applied? 1 Yes ☐ 2 No ☐

CONTINUED ON THE FOLLOWING PAGE

9. Do you have:

(a) an Associate of Arts degree?

1 Yes ☐ 2 No ☐

(b) a Baccalaureate degree?

1 Yes ☐ 2 No ☐

(c) a Master's degree?

1 Yes ☐ 2 No ☐

10. How would you validate residency?

_____

_____

_____

11. Do you have other suggestions for improving the applicant selection process of the Nursing Department?

1 Yes ☐ 2 No ☐

If so, please list them below:

_____

_____

_____

_____

_____

_____

THANK YOU FOR PARTICIPATING IN THIS SURVEY

FEB 9 1979

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CLEARINGHOUSE FOR
JUNIOR COLLEGES